DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

CERTIFIED MAIL_____-RETURN RECEIPT REQUEST

File No.: LA0005347
AI No.: 27051 Activity No.: PER19970001

Mr. Randal E. Tatum, Plant Manager
Lyondell Chemical Company
Post Office Box 3411
Lake Charles, Louisiana 70602

RE: Revised Draft Louisiana Pollutant Discharge Elimination System (LPDES) permit to discharge process wastewater and process area stormwater, sanitary wastewater, non-process area stormwater runoff, and utility wastewaters including once through non-contact cooling water, cooling tower blowdown, and other de-minimis amounts of miscellaneous utility discharges to the Calcasieu River Clooney Island Loop via local drainage (Outfalls 001, 008, 019, 020, 022, 029, & 500), Calcasieu River Coon Island Loop (existing Outfall 010 and Proposed Outfalls A10, B10, C10, and 31A), Calcasieu River Main Stem via local drainage (Proposed Outfalls D10, E10, F10, G10 & 31A), and Bayou Verdine (Outfalls 025, 026, & 500). from an existing chemical manufacturing facility located at 900 Interstate 10 West in Westlake, Calcasieu Parish.

Dear Mr. Tatum:

The Department of Environmental Quality proposes to reissue an LPDES permit with the effluent limitations, monitoring requirements, and special conditions listed in the attached REVISED DRAFT PERMIT. This draft has been revised in response to significant comments from Lyondell Chemical Company. Please note that this is a DRAFT PERMIT only and as such does not grant any authorization to discharge. Authorization to discharge will only be granted after all requirements described herein are satisfied and by the subsequent issuance of a FINAL PERMIT. Upon the effective date of the FINAL PERMIT, the FINAL PERMIT shall replace the previously effective EPA (NPDES) permit.

This Office will publish the enclosed public notice one time in the local newspaper(s) of general circulation and the Office of Environmental Services Public Notice Mailing List. In accordance with LAC 33:IX.6521.A, the applicant shall receive and is responsible for paying the invoice(s) from the above mentioned newspaper(s). LAC 33:IX.2781.A states: "...The costs of publication shall be borne by the applicant."

ENVIRONMENTAL **SERVICES**
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

The invoice, fee rating sheets, and a copy of the fee regulations will be sent under a separate cover letter as applicable. A copy of the entire Louisiana Water Quality Regulations may be obtained from the DEQ Office of Environmental Assessment, Post Office Box 4314, Baton Rouge, Louisiana 70821-4314, (225) 219-3236.

Pursuant to LAC 33:IX.1309.I, LAC 33:IX.6509.A.1 and LAC 33:I.1701, you must pay any outstanding fees to the Department. Therefore, you are encouraged to verify your facility's fee status by contacting LDEQ's Office of Management and Finance, Financial Services Division at (225) 219-3863. Failure to pay in the manner and time prescribed could result in applicable enforcement actions as prescribed in the Environmental Quality Act, including, but not limited to revocation or suspension of the applicable permit, and/or assessment of a civil penalty against you.

Should you have any questions concerning any part of the REVISED DRAFT PERMIT, public notice requirements, or fee, please feel free to contact Jenniffer Sheppard, Office of Environmental Services, at the address on the preceding page, telephone (225) 219-3138. To ensure that all correspondence regarding this facility is properly filed into the Department's Electronic Data Management System, you must reference your Agency Interest number 27051 and your LPDES permit number LA0005347 on all future correspondence to this Department, including Discharge Monitoring Reports.

Sincerely,

Jesse Chang
Environmental Scientist Manager
Industrial Water Permits

jls

Attachments: Coverletter, Revised Draft Permit (Parts I, II, and III), Revised Fact Sheet (Fact Sheet and Appendices A-F), and Revised Fee Sheet

ec: Melissa Reboul
Water Permits Division

Scott Guilliams
Water Permits Division

Ms. Gayle Denino
Office of Management & Finance

Permit Compliance Unit
Office of Environmental Compliance

Russell C. Watson,
Louisiana Field Office
US Fish and Wildlife Service

cc:coverletter, Revised Fee Sheet, permit and all attachments:

IO-W File

Jenniffer Sheppard
Water Permits Division

Public Notice
Scheduled for Publication

The notice associated with the following:

Request for Public Comment on a
Draft of a Revised Water Discharge Permit for
Lyondell Chemical Company
Agency Interest (AI) No. 27051, LA0005347, PER19970001

is scheduled to publish in the following paper (s)

Newspaper(s)	Scheduled Publication Date*
American Press, of Lake Charles, LA	Friday, March 9, 2007*

*In accordance with **LAC 33:IX.6521.A**, the applicant is responsible for payment of all costs of publication. Newspaper will bill applicant directly.*

Questions regarding publication or payment may be directed to:

DEQ Office of Environmental Services, Public Participation Group Staff:

Name: Calvin Fair

Phone: 225-219-3283

Email: ***Calvin.Fair@LA.GOV***

Comments:

***Actual date of publication is pending confirmation of publication by newspaper(s)**

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
LYONDELL CHEMICAL COMPANY
DRAFT OF A REVISED WATER DISCHARGE PERMIT

The LDEQ, Office of Environmental Services, is accepting written comments on a draft of a revised Louisiana Pollutant Discharge Elimination System (LPDES) permit prepared for Lyondell Chemical Company, P.O. Box 3411, Lake Charles, LA 70602. **The facility is located at 900 Interstate 10 West (south of I-10 and on the west bank of the Calcasieu River) in Westlake, Calcasieu Parish.** Upon the effective date of the final permit, the LPDES permit shall replace the previously issued EPA (NPDES) permit .

The principal discharge from this existing source is made into Calcasieu River Clooney Island Loop via local drainage (Outfalls 001, 008, 019, 020, 022, 029 & 500), Calcasieu River Coon Island Loop (existing Outfall 010 and Proposed Outfalls A10, B10, C10, & 31A), Calcasieu River Main Stem via local drainage (Proposed Outfalls D10, E10, F10, G10 & 31A), and Bayou Verdine (Outfalls 025, 026, & 500), waters of the state classified for primary contact recreation, secondary contact recreation, and fish and wildlife propagation. Under the SIC Codes 2865, 2869, 4226, and 2819, the applicant proposes to discharge process wastewater and process area stormwater, sanitary wastewater, non-process area stormwater runoff, and utility wastewaters including once through non-contact cooling water, cooling tower blowdown, and other deminimis amounts of miscellaneous utility discharges from an existing chemical manufacturing facility.

During the preparation of this permit, it has been determined that the discharge will have no adverse impact on the existing uses of the receiving waterbody. As with any discharge, however, some change in existing water quality may occur.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Thursday, April 12, 2007.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The applications, revised draft permit, and fact sheet are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Inquiries or requests for additional information regarding this permit action should be directed to Jenniffer Sheppard, LDEQ, Water Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3138.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at maillistrequest@ldeq.org or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

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Permit public notices including electronic access to the draft permit and fact sheet can be viewed at the LDEQ permits public notice webpage at www.deq.state.la.us/news/PubNotice/ and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at http://www.state.la.us/ldbc/listservpage/ldeq_pn_listserv.htm.

All correspondence should specify AI Number 27051, Permit Number LA0005347, and Activity Number PER19970001.

Scheduled Publication Date: Friday, March 9, 2007

DRAFT

PERMIT NUMBER
LA0005347
AI No.: 27051

DEQ
LOUISIANA

OFFICE OF ENVIRONMENTAL SERVICES

Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

Lyondell Chemical Company
Post Office Box 3411
Lake Charles, Louisiana 70602

Type Facility: Chemical manufacturing facility

Location: 900 Interstate 10 West in Westlake
Calcasieu Parish

Receiving Waters: Calcasieu River Clooney Island Loop via local drainage (Outfalls 001, 008, 019, 020, 022, 029, & 500) - Subsegment 030301, Calcasieu River Coon Island Loop (existing Outfall 010 and Proposed Outfalls A10, B10, C10, 110, 210, & 31A) - Subsegment 030301, Calcasieu River Main Stem via local drainage (Proposed Outfalls D10, E10, F10, G10, & 31A) - Subsegment 030301, and Bayou Verdine (Outfalls 025, 026, & 500) - Subsegment 030306.

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on_____

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on_____

_____
Chuck Carr Brown, Ph.D.
Assistant Secretary

DRAFT

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of process wastewater from the Nitric Acid Plant; non-process area stormwater; non-process wastewaters; utility wastewaters; cooling water blowdown from the Nitric Acid Plant; Sabine River Water; previously tested hydrostatic test wastewaters from Internal Outfall 500; and stormwater from former manufacturing and support areas, and the Veolia demineralized water manufacturing area (estimated flow of 2.09 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder
pH Min/Max Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
Oil and Grease	03582	174	261	---	---	1/ 2 months	Grab
TSS	00530	Report	Report	---	---	1/week	24-hour Composite
Total Residual Chlorine(*3)	50060	3.5	8.7	---	---	1/week	Grab
Nitrate Nitrogen	00621	87	261	---	---	1/week	24-hour Composite
WHOLE EFFLUENT (CHRONIC)				(Percent %, UNLESS STATED)			
TOXICITY TESTING (*4)(*5)	STORET Code (*6)			Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*4)(*5)	STORET Code (*6)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 001, at the point of discharge prior to entering the Calcasieu River Clooney Island Loop and/or mixing with any other waters.

FOOTNOTE(S):

(*1) When discharging.

(*2) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

FOOTNOTE(S) CONTINUED:

(*3) See Part II.J.

(*4) Reporting Outfall will be 001. Results shall be reported on DMR as Outfall TX1.

(*5) See Part II.U for biomonitoring requirements.

(*6) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 008, the continuous discharge of once through non-contact cooling water and de minimis discharges of utility wastewaters (estimated flow is 0.906 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
TOC (net) (*2)	00680	---	---	Report	5	3/week	24-hour Composite
Temperature (°F)	00011	---	---	---	105 °F(*3)	*Continuous*	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events *>60 Minutes*	82581	---	0(*4)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*4)	---	---	Continuous	Recorder
pH Min/Max Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*5)(*8)	STORET Code (*7)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency(*6)	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 008 continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*5)(*8)	STORET Code (*7)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency(*6)	Sample Type
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 008, at the point of discharge prior to where the once through non-contact cooling water discharge enters into the waters of the Calcasieu River Clooney Island Loop and/or prior to mixing with any other waters.

FOOTNOTE(S):

(*1) When Discharging

(*2) The daily TOC concentration of the once-through cooling water system effluent less the daily TOC concentration of the once-through cooling water system intake shall not exceed 5 mg/L. Concurrent sampling of cooling water system intake effluent is required.

(*3) Instantaneous maximum.

(*4) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*5) Reporting Outfall will be 008. Results shall be reported on DMR as Outfall TX8.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 008 continued)

FOOTNOTE(S) CONTINUED:

(*6) To be taken during a period of chlorination, biocide(s) usage, or other potentially toxic substance being discharged on an intermittent basis. DMR's shall be submitted annually. If none of the above conditions occurs during the year, quarterly DMR's must be turned in with a notation in the comment section to indicate this is the case.

(*7) Given test method or other, as approved at 40 CFR part 136.

(*8) See Part II.U for biomonitoring requirements.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - BIOLOGICAL TREATMENT WITH A NON-OPERATIONAL TDI UNIT AND AN OPERATIONAL TDA UNIT
(COON ISLAND LOOP LOCATION)

During the period beginning on the effective date of the permit (while the plant is using the biological treatment option) with the TDI Unit non-operational and the TDA Unit operational and lasting through the startup another operational phase(*1), the outfall relocation to the Main Channel of the Calcasieu (*1) or until June 12, 2008 the permittee is authorized to discharge from:

Outfall 010 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel (*9)	01067	4.8204	11.3521	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.42	---	---	1/year	24-hour Composite
Benzene	34030	0.53	1.39	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.1100	2.9400	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.12	2.96	---	---	1/year	24-hour Composite
Chloroform	32106	0.89	2.55	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.53	4.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.21	0.52	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.25	0.65	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.90	6.57	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	1.5400	6.0400	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.15	3.14	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.06	2.74	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.38	1.52	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.45	1.38	---	---	1/year	24-hour Composite
Toluene	34010	0.28	0.78	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.22	0.59	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.30	1.10	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.25	0.67	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.02	2.05	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.09	0.28	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.11	0.32	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.19	0.45	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.19	32.31	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.60	1.92	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.41	4.64	---	---	1/year	24-hour Composite
Phenol	34694	0.18	0.42	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.52	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.52	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.52	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*7)	34526	0.2000	0.5200	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*7)	34247	0.2100	0.5300	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.53	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.52	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.00	2.72	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.52	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.68	6.38	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.15	2.96	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.57	1.42	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.23	0.48	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.32	0.81	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	0.73	1.83	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.24	0.60	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.52	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	1.5000	5.9900	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.1100	2.9700	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.07	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.52	---	---	1/year	24-hour Composite
Nitrobenzene	34447	16.74	47.87	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.52	---	---	1/year	24-hour Composite
Pyrene	34469	0.22	0.55	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.65	6.31	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) *TOXICITY TESTING* (*10)(*11)STORET Code (*12)				(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 010, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall A10, B10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part *III.D.5.*

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that Ammonia (as N) limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be 010. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.S for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS - BIOLOGICAL TREATMENT WITH A NON-OPERATIONAL TDI UNIT AND AN OPERATIONAL TDA UNIT
(COON ISLAND LOOP LOCATION)

During the period beginning on June 13, 2008 (while the plant is using biological treatment) and the TDI Unit is non-operational and the TDA Unit is operational and lasting through the relocation of this outfall to the Main Channel of the Calcasieu River (*1), other operational phases(*1), or the expiration date the permittee is authorized to discharge from:

Outfall 010 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel (*9)	01067	1.8441	4.3780	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Final Limitations -Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.42	---	---	1/year	24-hour Composite
Benzene	34030	0.53	1.39	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.1100	2.9018	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.12	2.96	---	---	1/year	24-hour Composite
Chloroform	32106	0.89	2.55	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.53	4.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.21	0.52	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.25	0.65	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.90	6.57	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	1.5400	4.6581	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.15	3.14	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.06	2.74	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.38	1.52	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.45	1.38	---	---	1/year	24-hour Composite
Toluene	34010	0.28	0.78	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.22	0.59	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.30	1.10	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.25	0.67	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.02	2.05	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.09	0.28	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.11	0.32	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.19	0.45	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.19	32.31	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.60	1.92	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.41	4.64	---	---	1/year	24-hour Composite
Phenol	34694	0.18	0.42	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.52	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.52	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.52	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.53	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.52	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.00	2.72	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.52	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.68	6.38	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Final Limitations -Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.15	2.96	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.57	1.42	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.23	0.48	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.32	0.81	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	0.73	1.83	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.24	0.60	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.52	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0003	0.0006	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.0397	0.0943	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.07	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.52	---	---	1/year	24-hour Composite
Nitrobenzene	34447	16.74	47.87	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.52	---	---	1/year	24-hour Composite
Pyrene	34469	0.22	0.55	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.65	6.31	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Whole Effluent Lethality (7-Day NOEC)	22414	---	---	7	7	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Final Limitations -Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 010, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall A10, B10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 010 Final Limitations -Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be 010. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.T for biomonitoring requirements

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH A NON-OPERATIONAL TDI UNIT AND AN OPERATIONAL TDA UNIT (COON ISLAND LOOP LOCATION)

During the period beginning on the effective date of the permit (while the plant is using non-biological treatment) where the TDI Unit is non-operational and the TDA Unit is operational and lasting through the startup another operational phase(*1), the outfall relocation to the Main Channel of the Calcasieu (*1) or until June 12, 2008 the permittee is authorized to discharge from:

Outfall A10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel (*9)	01067	4.8204	11.3521	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations Other Units (lbs/day, UNLESS STATED) (mg/L, UNLESS STATED)				Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.39	---	---	1/year	24-hour Composite
Benzene	34030	0.59	1.38	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.4626	3.9140	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.13	3.04	---	---	1/year	24-hour Composite
Chloroform	32106	1.14	3.35	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.85	5.91	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.23	0.62	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.26	0.68	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.02	8.18	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	2.0188	8.1781	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.46	3.91	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.13	3.04	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.37	1.75	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.54	1.69	---	---	1/year	24-hour Composite
Toluene	34010	0.29	0.76	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.23	0.61	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.33	1.31	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.27	0.71	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.00	1.77	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.20	0.48	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.43	44.20	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.67	2.38	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.67	5.93	---	---	1/year	24-hour Composite
Phenol	34694	0.20	0.48	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.48	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.48	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.48	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.1957	0.4841	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.2060	0.4944	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.49	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.48	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.98	2.66	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.48	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.02	8.18	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.46	3.91	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.46	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.47	1.16	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.21	0.44	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.23	0.56	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.48	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	2.0188	8.1781	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.4626	3.9140	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.02	8.18	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.48	---	---	1/year	24-hour Composite
Nitrobenzene	34447	23.04	65.94	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.48	---	---	1/year	24-hour Composite
Pyrene	34469	0.21	0.49	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.02	8.18	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall A10, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to *the start up another operational phase* (proposed Outfall 010, B10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical *dimethyl hydrazine [UDMH]and ketazine* production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be A10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.S for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS -NON-BIOLOGICAL TREATMENT WITH A NON-OPERATIONAL TDI UNIT AND AN OPERATIONAL TDA UNIT (COON ISLAND LOOP LOCATION)

During the period beginning on June 13, 2008 (while the plant is using non-biological treatment) with theTDI Unit non-operational and the TDA Unit operational and lasting through the startup of another operational phase(*1), the relocation of this outfall to the Main Channel of the Calcasieu River (*1), or the expiration date the permittee is authorized to discharge from:

Outfall A10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel (*9)	01067	1.8441	4.3780	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.39	---	---	1/year	24-hour Composite
Benzene	34030	0.59	1.38	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.2193	2.9018	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.13	3.04	---	---	1/year	24-hour Composite
Chloroform	32106	1.14	3.35	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.85	5.91	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.23	0.62	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.26	0.68	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.02	8.18	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	1.9621	4.6581	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.46	3.91	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.13	3.04	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.37	1.75	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.54	1.69	---	---	1/year	24-hour Composite
Toluene	34010	0.29	0.76	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.23	0.61	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.33	1.31	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.27	0.71	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.00	1.77	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.20	0.48	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.43	44.20	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.67	2.38	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.67	5.93	---	---	1/year	24-hour Composite
Phenol	34694	0.20	0.48	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.48	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.48	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.48	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.49	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.48	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.98	2.66	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.48	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.02	8.18	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.46	3.91	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.46	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.47	1.16	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.21	0.44	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.23	0.56	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.48	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0003	0.0006	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.0397	0.0943	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.02	8.18	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.48	---	---	1/year	24-hour Composite
Nitrobenzene	34447	23.04	65.94	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.48	---	---	1/year	24-hour Composite
Pyrene	34469	0.21	0.49	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.02	8.18	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Whole Effluent Lethality (7-Day NOEC)	22414	---	---	7	7	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall A10, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall 010, B10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall A10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be A10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.T for biomonitoring requirements

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH TDI AND TDA UNITS BOTH NON-OPERATIONAL (COON ISLAND LOOP LOCATION)

During the period beginning on the effective date of the permit (while the plant is using non-biological treatment) where TDA and TDI Units are both non-operational and lasting through the startup of another operational phase(*1), the outfall relocation to the Main Channel of the Calcasieu (*1) or until June 12, 2008 the permittee is authorized to discharge from:

Outfall B10 (*2), the continuous discharge of treated process wastewaters from the Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 2.853 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	554	1409	---	---	1/week	24-hour Composite
TSS	00530	896	2398	---	---	1/week	24-hour Composite
Oil and Grease	03582	108	162	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	8.7	15.9	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel	01067	0.51	1.19	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Interim Limitations - Non-Biological Treatment -TDI and TDA Units are Both Non-Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
				Other Units			
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.73	1.80	---	---	1/year	24-hour Composite
Benzene	34030	0.44	1.04	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.1002	2.9442	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	0.85	2.29	---	---	1/year	24-hour Composite
Chloroform	32106	0.86	2.52	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.17	0.46	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.39	4.45	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.17	0.46	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.19	0.51	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.52	6.15	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	1.5186	6.1518	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.10	2.94	---	---	1/year	24-hour Composite
Methyl Chloride	34418	0.85	2.29	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.28	1.32	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.40	1.27	---	---	1/year	24-hour Composite
Toluene	34010	0.22	0.57	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.17	0.46	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.25	0.98	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.20	0.53	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	0.75	1.33	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.15	0.36	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.60	2.15	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.35	33.25	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.50	1.79	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.26	4.46	---	---	1/year	24-hour Composite
Phenol	34694	0.15	0.36	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.15	0.36	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.15	0.36	---	---	1/year	24-hour Composite
Anthracene	34220	0.15	0.36	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.1472	0.3641	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.1550	0.3719	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.15	0.37	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.15	0.36	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.74	2.00	---	---	1/year	24-hour Composite
Chrysene	34320	0.15	0.36	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.52	6.15	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Interim Limitations - Non-Biological Treatment -TDI and TDA Units are Both Non-Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.10	2.94	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.94	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.36	0.88	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.15	0.36	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.15	0.33	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.17	0.42	---	---	1/year	24-hour Composite
Fluorene	34381	0.15	0.36	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	1.5186	6.1518	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.1002	2.9442	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.15	---	---	1/year	24-hour Composite
Naphthalene	34696	0.15	0.36	---	---	1/year	24-hour Composite
Nitrobenzene	34447	17.33	49.60	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.15	0.36	---	---	1/year	24-hour Composite
Pyrene	34469	0.15	0.37	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.52	6.15	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Interim Limitations - Non-Biological Treatment -TDI and TDA Units are Both Non-Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall B10, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall 010, A10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Interim Limitations - Non-Biological Treatment -TDI and TDA Units are Both Non-Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be B10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.S for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH TDI AND TDA UNITS BOTH NON-OPERATIONAL (COON ISLAND LOOP LOCATION)

During the period beginning on June 13, 2008 (while the plant is using non-biological treatment) with TDA and TDI Units both non-operational and lasting through the startup of another operational phase(*1), the relocation of this outfall to the Main Channel of the Calcasieu River (*1), or the expiration date the permittee is authorized to discharge from:

Outfall B10 (*2), the continuous discharge of treated process wastewaters from the Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 2.853 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	554	1409	---	---	1/week	24-hour Composite
TSS	00530	896	2398	---	---	1/week	24-hour Composite
Oil and Grease	03582	108	162	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	8.7	15.9	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel	01067	0.51	1.19	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Final Limitations - Non-Biological Treatment -TDI and TDA Units Both Non-Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.73	1.80	---	---	1/year	24-hour Composite
Benzene	34030	0.44	1.04	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.1002	2.8948	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	0.85	2.29	---	---	1/year	24-hour Composite
Chloroform	32106	0.86	2.52	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.17	0.46	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.39	4.45	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.17	0.46	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.19	0.51	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.52	6.15	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	1.5186	4.4646	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.10	2.94	---	---	1/year	24-hour Composite
Methyl Chloride	34418	0.85	2.29	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.28	1.32	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.40	1.27	---	---	1/year	24-hour Composite
Toluene	34010	0.22	0.57	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.17	0.46	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.25	0.98	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.20	0.53	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	0.75	1.33	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.15	0.36	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.60	2.15	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.35	33.25	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.50	1.79	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.26	4.46	---	---	1/year	24-hour Composite
Phenol	34694	0.15	0.36	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.15	0.36	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.15	0.36	---	---	1/year	24-hour Composite
Anthracene	34220	0.15	0.36	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.15	0.37	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.15	0.36	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.74	2.00	---	---	1/year	24-hour Composite
Chrysene	34320	0.15	0.36	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.52	6.15	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Final Limitations - Non-Biological Treatment -TDI and TDA Units Both Non-Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.10	2.94	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.94	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.36	0.88	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.15	0.36	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.15	0.33	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.17	0.42	---	---	1/year	24-hour Composite
Fluorene	34381	0.15	0.36	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0003	0.0006	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.0381	0.0904	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.15	---	---	1/year	24-hour Composite
Naphthalene	34696	0.15	0.36	---	---	1/year	24-hour Composite
Nitrobenzene	34447	17.33	49.60	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.15	0.36	---	---	1/year	24-hour Composite
Pyrene	34469	0.15	0.37	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.52	6.15	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Whole Effluent Lethality (7-Day NOEC)	22414	---	---	7	7	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Final Limitations - Non-Biological Treatment -TDI and TDA Units Both Non-Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall B10,at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall 010, A10, or C10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall B10 Final Limitations - Non-Biological Treatment -TDI and TDA Units Both Non-Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be B10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.T for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - BIOLOGICAL TREATMENT WITH THE TDI AND TDA UNITS BOTH OPERATIONAL (COON ISLAND LOOP LOCATION)

During the period beginning on the effective date of the permit (while the plant is using the biological treatment option) where the TDI and TDA Units are both operational and lasting through the startup of another operational phase(*1), outfall relocation to the Main Channel of the Calcasieu (*1) or until June 12, 2008 the permittee is authorized to discharge from:

Outfall C10 (*2), the continuous discharge of treated process wastewaters from the TDI Plant, TDI Vent Scrub; TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater;previosly monitored/treated sanitary wastewater from Internal Outfall 31A; Hydrazine Ketazine wastewaters from Arch Chemical; TDI Incinerator wastewater; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; and utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.799 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	838	2169	---	---	1/week	24-hour Composite
TSS	00530	1290	3668	---	---	1/week	24-hour Composite
Oil and Grease	03582	185	277	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	15.8	27.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel (*9)	01067	8.8796	20.9117	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Interim Limitations - Biological Treatment - TDI and TDA Units are Both Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	1.48	3.69	---	---	1/year	24-hour Composite
Benzene	34030	0.78	2.11	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.5000	3.9600	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.49	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.69	4.47	---	---	1/year	24-hour Composite
Chloroform	32106	1.22	3.47	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.34	0.92	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	2.17	6.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.31	0.74	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.37	0.96	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.82	9.16	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	2.1000	8.0800	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.58	4.37	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.58	4.01	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.59	2.19	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.64	1.94	---	---	1/year	24-hour Composite
Toluene	34010	0.43	1.19	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.34	0.90	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.44	1.57	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.38	0.99	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.56	3.25	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.18	0.57	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.23	0.65	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.29	0.67	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	1.22	4.34	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.30	42.98	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.88	2.68	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	2.01	6.40	---	---	1/year	24-hour Composite
Phenol	34694	0.27	0.61	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.32	0.81	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.32	0.81	---	---	1/year	24-hour Composite
Anthracene	34220	0.32	0.81	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.3200	0.8100	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.3300	0.8300	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.33	0.83	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.32	0.81	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.54	4.17	---	---	1/year	24-hour Composite
Chrysene	34320	0.32	0.81	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.38	8.77	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Interim Limitations - Biological Treatment - TDI and TDA Units are Both Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations		Other Units		Monitoring Requirements	
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.58	4.00	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.49	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.92	2.29	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.30	0.74	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.35	0.76	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.66	1.66	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	1.48	3.73	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.36	0.93	---	---	1/year	24-hour Composite
Fluorene	34381	0.32	0.81	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	2.0200	7.9800	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.5200	4.0300	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.05	8.13	---	---	1/year	24-hour Composite
Naphthalene	34696	0.32	0.81	---	---	1/year	24-hour Composite
Nitrobenzene	34447	22.19	63.45	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.32	0.81	---	---	1/year	24-hour Composite
Pyrene	34469	0.34	0.86	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.33	8.64	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Interim Limitations - Biological Treatment - TDI and TDA Units are Both Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall C10, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall 010, A10, or B10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Interim Limitations - Biological Treatment - TDI and TDA Units are Both Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be C10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.S for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS -BIOLOGICAL TREATMENT WITH THE TDI AND TDA UNITS BOTH OPERATIONAL (COON ISLAND LOOP LOCATION)

During the period beginning on June 13, 2008 (while the plant is using biological treatment) where the TDI and TDA Units are both operational and lasting through the startup of another operational phase(*1), the relocation of this outfall to the Main Channel of the Calcasieu River (*1) or the expiration date the permittee is authorized to discharge from:

- Outfall C10 (*2), the continuous discharge of treated process wastewaters from the TDI Plant, TDI Vent Scrub; TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; previosly monitored/treated sanitary wastewater from Internal Outfall 31A; Hydrazine Ketazine wastewaters from Arch Chemical; TDI Incinerator wastewater; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; and utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.799 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	838	2169	---	---	1/week	24-hour Composite
TSS	00530	1290	3668	---	---	1/week	24-hour Composite
Oil and Grease	03582	185	277	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	15.8	27.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel (*9)	01067	2.0131	4.7792	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Final Limitations - Biological Treatment - TDI and TDA Units Both Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations		Other Units		Monitoring Requirements	
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	1.48	3.69	---	---	1/year	24-hour Composite
Benzene	34030	0.78	2.11	---	---	1/year	24-hour Composite
Carbon Tetrachloride(*9)	32102	1.2258	2.9173	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.49	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.69	4.47	---	---	1/year	24-hour Composite
Chloroform	32106	1.22	3.47	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.34	0.92	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	2.17	6.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.31	0.74	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.37	0.96	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.82	9.16	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene(*9)	51044	2.1000	5.0849	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.58	4.37	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.58	4.01	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.59	2.19	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.64	1.94	---	---	1/year	24-hour Composite
Toluene	34010	0.43	1.19	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.34	0.90	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.44	1.57	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.38	0.99	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.56	3.25	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.18	0.57	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.23	0.65	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.29	0.67	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	1.22	4.34	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.30	42.98	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.88	2.68	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	2.01	6.40	---	---	1/year	24-hour Composite
Phenol	34694	0.27	0.61	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.32	0.81	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.32	0.81	---	---	1/year	24-hour Composite
Anthracene	34220	0.32	0.81	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.33	0.83	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.32	0.81	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.54	4.17	---	---	1/year	24-hour Composite
Chrysene	34320	0.32	0.81	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.38	8.77	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Final Limitations - Biological Treatment - TDI and TDA Units Both Operational - Coon Island Loop continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.58	4.00	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.49	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.92	2.29	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.30	0.74	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.35	0.76	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.66	1.66	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	1.48	3.73	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.36	0.93	---	---	1/year	24-hour Composite
Fluorene	34381	0.32	0.81	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0003	0.0006	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.0434	0.1030	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.05	8.13	---	---	1/year	24-hour Composite
Naphthalene	34696	0.32	0.81	---	---	1/year	24-hour Composite
Nitrobenzene	34447	22.19	63.45	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.32	0.81	---	---	1/year	24-hour Composite
Pyrene	34469	0.34	0.86	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.33	8.64	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
Whole Effluent Lethality (7-Day NOEC)	22414	---	---	9	9	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Final Limitations - Biological Treatment - TDI and TDA Units Both Operational - Coon Island Loop continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall C10, at the point of discharge from T438, prior to discharge into the Calcasieu River at Coon Island Loop and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall 010, A10, or B10) or beginning to discharge into the Main Channel of the Calcasieu River through the new Outfall D10, E10, F10 or G10 location. This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall C10 Final Limitations - Biological Treatment - TDI and TDA Units Both Operational - Coon Island Loop continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be C10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.T for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - BIOLOGICAL TREATMENT WITH THE TDI UNIT NON-OPERATIONAL AND THE TDA UNIT OPERATIONAL
(CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning right after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using biological treatment) and the TDI Unit is non-operational and the TDA Unit is operational and lasting through June 12, 2008, or until the plant moves into aother operational phase(*1) the permittee is authorized to discharge from:

Outfall D10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel	01067	4.82	11.35	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational -Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.42	---	---	1/year	24-hour Composite
Benzene	34030	0.53	1.39	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.11	2.94	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.12	2.96	---	---	1/year	24-hour Composite
Chloroform	32106	0.89	2.55	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.53	4.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.21	0.52	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.25	0.65	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.90	6.57	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	1.54	6.04	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.15	3.14	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.06	2.74	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.38	1.52	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.45	1.38	---	---	1/year	24-hour Composite
Toluene	34010	0.28	0.78	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.22	0.59	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.30	1.10	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.25	0.67	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.02	2.05	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.09	0.28	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.11	0.32	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.19	0.45	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.19	32.31	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.60	1.92	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.41	4.64	---	---	1/year	24-hour Composite
Phenol	34694	0.18	0.42	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.52	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.52	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.52	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.2000	0.5200	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.2100	0.5300	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.53	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.52	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.00	2.72	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.52	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.68	6.38	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational -Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.15	2.96	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.57	1.42	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.23	0.48	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.32	0.81	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	0.73	1.83	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.24	0.60	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.52	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	1.5000	5.9900	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.1100	2.9700	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.07	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.52	---	---	1/year	24-hour Composite
Nitrobenzene	34447	16.74	47.87	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.52	---	---	1/year	24-hour Composite
Pyrene	34469	0.22	0.55	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.65	6.31	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational -Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall D10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall E10, F10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Interim Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational -Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that Ammonia (as N) limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be D10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS - BIOLOGICAL TREATMENT WITH THE TDI UNIT NON-OPERATIONAL AND THE TDA UNIT OPERATIONAL
(CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using biological treatment) and the TDI Unit is non-operational and the TDA Unit is operational and lasting through the startup of another operational phase(*1) or permit expiration date the permittee is authorized to discharge from:

Outfall D10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel	01067	4.82	11.35	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Final Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
				Other Units			
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.42	---	---	1/year	24-hour Composite
Benzene	34030	0.53	1.39	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.11	2.94	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.12	2.96	---	---	1/year	24-hour Composite
Chloroform	32106	0.89	2.55	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.53	4.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.21	0.52	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.25	0.65	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.90	6.57	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	1.54	6.04	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.15	3.14	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.06	2.74	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.38	1.52	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.45	1.38	---	---	1/year	24-hour Composite
Toluene	34010	0.28	0.78	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.22	0.59	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.30	1.10	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.25	0.67	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.02	2.05	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.09	0.28	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.11	0.32	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.19	0.45	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.19	32.31	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.60	1.92	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.41	4.64	---	---	1/year	24-hour Composite
Phenol	34694	0.18	0.42	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.52	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.52	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.52	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.53	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.52	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.00	2.72	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.52	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.68	6.38	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Final Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.15	2.96	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.57	1.42	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.23	0.48	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.32	0.81	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	0.73	1.83	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.24	0.60	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.52	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0049	0.0116	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.1633	0.3877	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.07	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.52	---	---	1/year	24-hour Composite
Nitrobenzene	34447	16.74	47.87	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.52	---	---	1/year	24-hour Composite
Pyrene	34469	0.22	0.55	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.65	6.31	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING(*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Final Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING LIMIT (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall D10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall E10, F10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall D10 Final Limitations -Biological Treatment -the TDI Unit is Non-Operational and the TDA Unit is Operational - Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that Ammonia (as N) limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be D10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH THE TDI UNIT NON-OPERATIONAL AND THE TDA UNIT OPERATIONAL
(CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning right after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using non-biological treatment) and the TDI Unit is non-operational and the TDA Unit is operational and lasting through the startup of another operational phase(*1) or June 12, 2008 the permittee is authorized to discharge from:

Outfall E10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel	01067	4.82	11.35	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.39	---	---	1/year	24-hour Composite
Benzene	34030	0.59	1.38	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.13	3.04	---	---	1/year	24-hour Composite
Chloroform	32106	1.14	3.35	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.85	5.91	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.23	0.62	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.26	0.68	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.02	8.18	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	2.02	8.18	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.46	3.91	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.13	3.04	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.37	1.75	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.54	1.69	---	---	1/year	24-hour Composite
Toluene	34010	0.29	0.76	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.23	0.61	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.33	1.31	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.27	0.71	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.00	1.77	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.20	0.48	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.43	44.20	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.67	2.38	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.67	5.93	---	---	1/year	24-hour Composite
Phenol	34694	0.20	0.48	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.48	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.48	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.48	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.1957	0.4841	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.2060	0.4944	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.49	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.48	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.98	2.66	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.48	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.02	8.18	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.46	3.91	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.46	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.47	1.16	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.21	0.44	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.23	0.56	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.48	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	2.0188	8.1781	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene(*9)	34391	1.4626	3.9140	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.02	8.18	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.48	---	---	1/year	24-hour Composite
Nitrobenzene	34447	23.04	65.94	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.48	---	---	1/year	24-hour Composite
Pyrene	34469	0.21	0.49	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.02	8.18	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall E10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, F10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Interim Limitations -Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that Ammonia (as N) limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be E10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS -NON-BIOLOGICAL TREATMENT WITH THE TDI UNIT NON-OPERATIONAL AND THE TDA UNIT OPERATIONAL
(CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using non-biological treatment) and the TDI Unit is non-operational and the TDA Unit is operational and lasting through the startup of another operational phase(*1) or the expiration date the permittee is authorized to discharge from:

Outfall E10 (*2), the continuous discharge of treated process wastewaters from the TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.148 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	649	1666	---	---	1/week	24-hour Composite
TSS	00530	1025	2817	---	---	1/week	24-hour Composite
Oil and Grease	03582	133	199	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	11.0	19.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel	01067	4.82	11.35	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.97	2.39	---	---	1/year	24-hour Composite
Benzene	34030	0.59	1.38	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.46	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.13	3.04	---	---	1/year	24-hour Composite
Chloroform	32106	1.14	3.35	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.23	0.61	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.85	5.91	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.23	0.62	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.26	0.68	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.02	8.18	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	2.02	8.18	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.46	3.91	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.13	3.04	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.37	1.75	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.54	1.69	---	---	1/year	24-hour Composite
Toluene	34010	0.29	0.76	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.23	0.61	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.33	1.31	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.27	0.71	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.00	1.77	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.20	0.48	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.80	2.85	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.43	44.20	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.67	2.38	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.67	5.93	---	---	1/year	24-hour Composite
Phenol	34694	0.20	0.48	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.20	0.48	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.20	0.48	---	---	1/year	24-hour Composite
Anthracene	34220	0.20	0.48	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.21	0.49	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.20	0.48	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.98	2.66	---	---	1/year	24-hour Composite
Chrysene	34320	0.20	0.48	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.02	8.18	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.46	3.91	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.46	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.47	1.16	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.20	0.48	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.21	0.44	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.23	0.56	---	---	1/year	24-hour Composite
Fluorene	34381	0.20	0.48	---	---	1/year	24-hour Composite
Hexachlorobenzene(*9)	39700	0.0049	0.0116	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene(*9)	34391	0.1633	0.3877	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.02	8.18	---	---	1/year	24-hour Composite
Naphthalene	34696	0.20	0.48	---	---	1/year	24-hour Composite
Nitrobenzene	34447	23.04	65.94	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.20	0.48	---	---	1/year	24-hour Composite
Pyrene	34469	0.21	0.49	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.02	8.18	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING(*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall E10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, F10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall E10 Final Limitations - Non-Biological Treatment - the TDI Unit is Non-Operational and the TDA Unit is Operational- Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that Ammonia (as N) limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be E10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH TDI AND TDA UNITS BOTH NON-OPERATIONAL (CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning right after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using non-biological treatment) and the TDA and TDI Units are non-operational and lasting through the startup of another operational phase(*1) or on June 12, 2008 the permittee is authorized to discharge from:

Outfall F10 (*2), the continuous discharge of treated process wastewaters from the Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 2.853 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	554	1409	---	---	1/week	24-hour Composite
TSS	00530	896	2398	---	---	1/week	24-hour Composite
Oil and Grease	03582	108	162	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	8.7	15.9	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel	01067	0.51	1.20	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Interim Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.73	1.80	---	---	1/year	24-hour Composite
Benzene	34030	0.44	1.04	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	0.85	2.29	---	---	1/year	24-hour Composite
Chloroform	32106	0.86	2.52	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.17	0.46	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.39	4.45	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.17	0.46	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.19	0.51	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.52	6.15	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	1.52	6.15	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.10	2.94	---	---	1/year	24-hour Composite
Methyl Chloride	34418	0.85	2.29	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.28	1.32	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.40	1.27	---	---	1/year	24-hour Composite
Toluene	34010	0.22	0.57	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.17	0.46	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.25	0.98	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.20	0.53	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	0.75	1.33	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.15	0.36	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.60	2.15	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.35	33.25	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.50	1.79	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.26	4.46	---	---	1/year	24-hour Composite
Phenol	34694	0.15	0.36	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.15	0.36	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.15	0.36	---	---	1/year	24-hour Composite
Anthracene	34220	0.15	0.36	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.1472	0.3641	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.1550	0.3719	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.15	0.37	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.15	0.36	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.74	2.00	---	---	1/year	24-hour Composite
Chrysene	34320	0.15	0.36	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.52	6.15	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Interim Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.10	2.94	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.94	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.36	0.88	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.15	0.36	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.15	0.33	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.17	0.42	---	---	1/year	24-hour Composite
Fluorene	34381	0.15	0.36	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	1.5186	6.1518	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.1002	2.9442	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.15	---	---	1/year	24-hour Composite
Naphthalene	34696	0.15	0.36	---	---	1/year	24-hour Composite
Nitrobenzene	34447	17.33	49.60	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.15	0.36	---	---	1/year	24-hour Composite
Pyrene	34469	0.15	0.37	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.52	6.15	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Interim Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational - Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall F10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, E10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Interim Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational - Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be F10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS - NON-BIOLOGICAL TREATMENT WITH THE TDI AND TDA UNITS BOTH NON-OPERATIONAL (CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using non-biological treatment) and the TDA and TDI Units are non-operational and lasting through the startup of another operational phase(*1) or the expiration date the permittee is authorized to discharge from:

Outfall F10 (*2),the continuous discharge of treated process wastewaters from the Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; non-process area stormwater; Hydrazine Ketazine wastewaters from Arch Chemical; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; previosly monitored/treated sanitary wastewater from Internal Outfall 310; utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 2.853 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	554	1409	---	---	1/week	24-hour Composite
TSS	00530	896	2398	---	---	1/week	24-hour Composite
Oil and Grease	03582	108	162	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	8.71	5.9	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel	01067	0.51	1.20	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Final Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational -Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	0.73	1.80	---	---	1/year	24-hour Composite
Benzene	34030	0.44	1.04	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.10	2.94	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	0.85	2.29	---	---	1/year	24-hour Composite
Chloroform	32106	0.86	2.52	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.17	0.46	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	1.39	4.45	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.17	0.46	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.19	0.51	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	1.52	6.15	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	1.52	6.15	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.10	2.94	---	---	1/year	24-hour Composite
Methyl Chloride	34418	0.85	2.29	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.28	1.32	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.40	1.27	---	---	1/year	24-hour Composite
Toluene	34010	0.22	0.57	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.17	0.46	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.25	0.98	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.20	0.53	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	0.75	1.33	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2,4-Dimethylphenol	34606	0.15	0.36	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	0.60	2.15	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	9.35	33.25	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.50	1.79	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	1.26	4.46	---	---	1/year	24-hour Composite
Phenol	34694	0.15	0.36	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.15	0.36	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.15	0.36	---	---	1/year	24-hour Composite
Anthracene	34220	0.15	0.36	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.15	0.37	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.15	0.36	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	0.74	2.00	---	---	1/year	24-hour Composite
Chrysene	34320	0.15	0.36	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	1.52	6.15	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Final Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational -Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.10	2.94	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.10	2.94	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.36	0.88	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.15	0.36	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.15	0.33	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.17	0.42	---	---	1/year	24-hour Composite
Fluorene	34381	0.15	0.36	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0049	0.0116	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.1616	0.3837	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	1.52	6.15	---	---	1/year	24-hour Composite
Naphthalene	34696	0.15	0.36	---	---	1/year	24-hour Composite
Nitrobenzene	34447	17.33	49.60	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.15	0.36	---	---	1/year	24-hour Composite
Pyrene	34469	0.15	0.37	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	1.52	6.15	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Final Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational -Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall F10,at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, E10 or G10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall F10 Final Limitations - Non-Biological Treatment -the TDI and TDA Units are Both Non-Operational -Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be F10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

INTERIM LIMITATIONS - BIOLOGICAL TREATMENT WITH THE TDI AND TDA UNITS BOTH OPERATIONAL (CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning right after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using biological treatment) and the TDA and TDI Units are both operational and lasting through June 12, 2008 or startup of another operational phase(*1) the permittee is authorized to discharge from:

Outfall G10 (*2), the continuous discharge of treated process wastewaters from the TDI Plant, TDI Vent Scrub; TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater;previosly monitored/treated sanitary wastewater from Internal Outfall 31A; Hydrazine Ketazine wastewaters from Arch Chemical; TDI Incinerator wastewater; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; and utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.799 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	838	2169	---	---	1/week	24-hour Composite
TSS	00530	1290	3668	---	---	1/week	24-hour Composite
Oil and Grease	03582	185	277	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	15.8	27.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	Report	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	Report	---	---	1/quarter	Grab
Total Nickel (*9)	01067	8.8796	20.9117	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Interim Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	1.48	3.69	---	---	1/year	24-hour Composite
Benzene	34030	0.78	2.11	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.50	3.96	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.49	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.69	4.47	---	---	1/year	24-hour Composite
Chloroform	32106	1.22	3.47	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.34	0.92	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	2.17	6.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.31	0.74	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.37	0.96	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.82	9.16	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	2.10	8.08	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.58	4.37	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.58	4.01	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.59	2.19	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.64	1.94	---	---	1/year	24-hour Composite
Toluene	34010	0.43	1.19	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.34	0.90	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.44	1.57	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.38	0.99	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.56	3.25	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.18	0.57	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.23	0.65	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.29	0.67	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	1.22	4.34	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.30	42.98	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.88	2.68	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	2.01	6.40	---	---	1/year	24-hour Composite
Phenol	34694	0.27	0.61	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.32	0.81	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.32	0.81	---	---	1/year	24-hour Composite
Anthracene	34220	0.32	0.81	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	0.3200	0.8100	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	0.3300	0.8300	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.33	0.83	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.32	0.81	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.54	4.17	---	---	1/year	24-hour Composite
Chrysene	34320	0.32	0.81	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.38	8.77	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Interim Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.58	4.00	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.49	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.92	2.29	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.30	0.74	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.35	0.76	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.66	1.66	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	1.48	3.73	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.36	0.93	---	---	1/year	24-hour Composite
Fluorene	34381	0.32	0.81	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	2.0200	7.9800	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	1.5200	4.0300	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.05	8.13	---	---	1/year	24-hour Composite
Naphthalene	34696	0.32	0.81	---	---	1/year	24-hour Composite
Nitrobenzene	34447	22.19	63.45	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.32	0.81	---	---	1/year	24-hour Composite
Pyrene	34469	0.34	0.86	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.33	8.64	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Interim Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall G10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, E10 or F10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Interim Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be G10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

FINAL LIMITATIONS -BIOLOGICAL TREATMENT WITH THE TDI AND TDA UNITS BOTH OPERATIONAL (CALCASIEU RIVER MAIN STEM LOCATION)

During the period beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (*1) (while the plant is using biological treatment) and the TDA and TDI Units are both operational and lasting through the startup of another operational phase(*1) or the expiration date the permittee is authorized to discharge from:

Outfall G10 (*2), the continuous discharge of treated process wastewaters from the TDI Plant, TDI Vent Scrub; TDA Plant; TDA Still Bottoms; Hydrazine (Raschig) from Arch Chemical; Bioloab TCCA Plant; Reagent Chemicals; HYCO Plant I; HYCO III Plant; and Oxygen and Nitrogen Manufacturing wastewater from Air Products; process and non-process area stormwater; previosly monitored/treated sanitary wastewater from Internal Outfall 31A; Hydrazine Ketazine wastewaters from Arch Chemical; TDI Incinerator wastewater; Lab/Pilot Plant; water removed from liquid ammonia feedstock for Nitric Acid Plant; stormwater from Olin Corporation's caustic solution storage tank farm; and utility wastewaters including, but not limited to demineralized H2O from Veolia, power house and utilities wastewater, and cooling water; and wastewaters from Internal Outfalls 110 and 210 (estimated flow is 3.799 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*3)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*3)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	00310	838	2169	---	---	1/week	24-hour Composite
TSS	00530	1290	3668	---	---	1/week	24-hour Composite
Oil and Grease	03582	185	277	---	---	1/ 2 months	Grab
Total Residual Chlorine	50060	15.8	27.8	---	---	1/week	Grab
Ammonia (as N)(*4)(*6)	00610	495	743	---	---	3/week	24-hour Composite
Ammonia (as N)(*5)(*6)	00610	1571	2907	---	---	3/week	24-hour Composite
Organic Nitrogen	51020	938	1376	---	---	3/week	24-hour Composite
Nitrate Nitrogen	00621	210	299	---	---	3/week	24-hour Composite
METALS AND CYANIDE(*7)							
Total Copper (*8)	01042	---	4.5900	---	---	1/quarter	Grab
Total Mercury (*8)	71900	---	0.0316	---	---	1/quarter	Grab
Total Nickel (*9)	01067	7.7467	18.3911	---	---	1/ 2 months	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Final Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
VOLATILE COMPOUNDS(*7)							
Acrylonitrile	34215	1.48	3.69	---	---	1/year	24-hour Composite
Benzene	34030	0.78	2.11	---	---	1/year	24-hour Composite
Carbon Tetrachloride	32102	1.50	3.96	---	---	1/ 2 months	24-hour Composite
Chlorobenzene	34301	1.49	3.91	---	---	1/ 2 months	24-hour Composite
Chloroethane	34311	1.69	4.47	---	---	1/year	24-hour Composite
Chloroform	32106	1.22	3.47	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethane	34496	0.34	0.92	---	---	1/year	24-hour Composite
1,2-Dichloroethane	34531	2.17	6.88	---	---	1/ 2 months	24-hour Composite
1,1-Dichloroethylene	34501	0.31	0.74	---	---	1/year	24-hour Composite
1,2-trans-Dichloroethylene	34546	0.37	0.96	---	---	1/year	24-hour Composite
1,2-Dichloropropane	34541	2.82	9.16	---	---	1/ 2 months	24-hour Composite
1,3-Dichloropropylene	51044	2.10	8.08	---	---	1/ 6 months	24-hour Composite
Ethylbenzene	34371	1.58	4.37	---	---	1/year	24-hour Composite
Methyl Chloride	34418	1.58	4.01	---	---	1/year	24-hour Composite
Methylene Chloride	34423	0.59	2.19	---	---	1/ 2 months	24-hour Composite
Tetrachloroethylene	34475	0.64	1.94	---	---	1/year	24-hour Composite
Toluene	34010	0.43	1.19	---	---	1/year	24-hour Composite
1,1,1-Trichloroethane	34506	0.34	0.90	---	---	1/ 2 months	24-hour Composite
1,1,2-Trichloroethane	34511	0.44	1.57	---	---	1/year	24-hour Composite
Trichloroethylene	39180	0.38	0.99	---	---	1/year	24-hour Composite
Vinyl Chloride	39175	1.56	3.25	---	---	1/ 2 months	24-hour Composite
ACID COMPOUNDS(*7)							
2-Chlorophenol	34586	0.18	0.57	---	---	1/year	24-hour Composite
2,4-Dichlorophenol	34601	0.23	0.65	---	---	1/ 2 months	24-hour Composite
2,4-Dimethylphenol	34606	0.29	0.67	---	---	1/ 2 months	24-hour Composite
4,6-Dinitro-o-Cresol	34657	1.22	4.34	---	---	1/year	24-hour Composite
2,4-Dinitrophenol	34616	12.30	42.98	---	---	1/year	24-hour Composite
2-Nitrophenol	34591	0.88	2.68	---	---	1/year	24-hour Composite
4-Nitrophenol	34646	2.01	6.40	---	---	1/year	24-hour Composite
Phenol	34694	0.27	0.61	---	---	1/year	24-hour Composite
BASE NEUTRAL COMPOUNDS(*7)							
Acenaphthene	34205	0.32	0.81	---	---	1/year	24-hour Composite
Acenaphthylene	34200	0.32	0.81	---	---	1/year	24-hour Composite
Anthracene	34220	0.32	0.81	---	---	1/year	24-hour Composite
Benzo(a)anthracene (*8)	34526	---	0.3090	---	---	1/quarter	24-hour Composite
Benzo(a)pyrene (*8)	34247	---	0.3090	---	---	1/quarter	24-hour Composite
3,4-Benzofluoranthene	34230	0.33	0.83	---	---	1/year	24-hour Composite
Benzo(k)fluoranthene	34242	0.32	0.81	---	---	1/year	24-hour Composite
Bis(2-ethylhexyl)phthalate	39100	1.54	4.17	---	---	1/year	24-hour Composite
Chrysene	34320	0.32	0.81	---	---	1/year	24-hour Composite
1,2-Dichlorobenzene	34536	2.38	8.77	---	---	1/year	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Final Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
1,3-Dichlorobenzene	34566	1.58	4.00	---	---	1/year	24-hour Composite
1,4-Dichlorobenzene	34571	1.49	3.91	---	---	1/year	24-hour Composite
Diethyl phthalate	34336	0.92	2.29	---	---	1/year	24-hour Composite
Dimethyl phthalate	34341	0.30	0.74	---	---	1/year	24-hour Composite
Di-n-butyl phthalate	39110	0.35	0.76	---	---	1/year	24-hour Composite
2,4-Dinitrotoluene	34611	0.66	1.66	---	---	1/ 2 months	24-hour Composite
2,6-Dinitrotoluene	34626	1.48	3.73	---	---	1/year	24-hour Composite
Fluoranthene	34376	0.36	0.93	---	---	1/year	24-hour Composite
Fluorene	34381	0.32	0.81	---	---	1/year	24-hour Composite
Hexachlorobenzene (*9)	39700	0.0049	0.0117	---	---	1/ 6 months	24-hour Composite
Hexachlorobutadiene (*9)	34391	0.1669	0.3963	---	---	1/ 6 months	24-hour Composite
Hexachloroethane	34396	2.05	8.13	---	---	1/year	24-hour Composite
Naphthalene	34696	0.32	0.81	---	---	1/year	24-hour Composite
Nitrobenzene	34447	22.19	63.45	---	---	1/year	24-hour Composite
Phenanthrene	34461	0.32	0.81	---	---	1/year	24-hour Composite
Pyrene	34469	0.34	0.86	---	---	1/year	24-hour Composite
1,2,4-Trichlorobenzene	34551	2.33	8.64	---	---	1/year	24-hour Composite

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Final Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*10)(*11)	STORET Code (*12)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall G10, at the point of discharge from T438, prior to discharge into the Calcasieu River Main Stem and mixing with any other waters.

FOOTNOTE(S):

(*1) The permittee shall notify the Office of Environmental Services and Office of Environmental Compliance in writing, at least 30 days prior to the start up another operational phase (proposed Outfall D10, E10 or F10). This requirement will supersede Part III.D.5.

(*2) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

(*3) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.

(*4) Representative sample taken during operating conditions 1-4 (condition 1-no hydrazine production underway, condition 2-only ketazine production underway, condition 3- unsymmetrical dimethyl hydrazine [UDMH]and ketazine production underway, and condition 4-anhydrous hydrazine [AH] production underway). See Part II.N.

(*5) Representative sample taken during operation of condition 5 (monomethyl hydrazine [MMH] and ketazine production underway). See Part II.N.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall G10 Final Limitations - Biological Treatment - the TDI and TDA Units are Both Operational - Calcasieu River Main Stem continued)

FOOTNOTE(S) CONTINUED:

(*6) DMR reporting is required for both conditions outlined in footnotes (*4) and (*5). If there are no operations under one of the conditions, the permitee shall indicate N/A on the DMR for that limitation. The comment section on the DMR shall also indicate which condition was in operation during the monitoring period. If both scenerios, as described in footnotes (*4) and (*5), operated during the monitoring period, then results must be reported on the DMR for both limitations. The comment section must also indicate the operating period of each scenerio.

(*7) See Part II.J.

(*8) **See Part II.L**

(*9) **See Part II.M for Compliance Schedule**

(*10) Reporting Outfall will be G10. Results shall be reported on DMR as Outfall T10.

(*11) See Part II.U for biomonitoring requirements.

(*12) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning on the effective date of the permit and lasting through the expiration of the permit the permittee is authorized to discharge from:

Internal Outfall 110, the discharge of wastewaters from the HYCO Plant I (estimated flow of 0.016 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	3/week	Estimate
COD	00340	50.5	101	---	---	3/week	24-hour Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 110, at the point of discharge from the HYCO I inorganic treatment plant, prior to discharge into Coon Island Loop at Final Outfall 010, A10, B10, or C10, or into the Main Stem of the Calcasieu River through Final Outfall D10, E10, F10, or G10.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning on the effective date of the permit and lasting through the expiration of the permit the permittee is authorized to discharge from:

Internal Outfall 210, the discharge of wastewaters from the HYCO Plant III (estimated flow is 0.014 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	3/week	Estimate
COD	00340	43.4	86.8	---	---	3/week	24-hour Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 210, at the point of discharge from the HYCO III inorganic treatment plant, prior to discharge into Coon Island Loop at Final Outfall 010, A10, B10, or C10, or into the Main Stem of the Calcasieu River through Final Outfall D10, E10, F10, or G10.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date when the TDI and TDA Units are non-operational or the TDI Unit is non-operation and the TDA Unit is operational and lasting through the startup up both TDI and TDA Unit operations(*1) or the expiration date the permittee is authorized to discharge from:

Internal Outfall 310(*1), the discharge of treated sanitary wastewater (estimated flow is 0.003 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
		(lbs/day, UNLESS STATED)					
	STORET Code	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/6 months	Estimate
BOD_5	00310	---	---	---	45	1/6 months	Grab
TSS	00530	---	---	---	45	1/6 months	Grab
Fecal Coliform colonies/100 ml	74055	---	---	---	400	1/6 months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 310, at the point of discharge from the treatment facility prior to combining with the waters of Final Outfall 010, A10, B10, D10, E10, or F10.

FOOTNOTE(S):

(*1) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning upon start up of the TDI and TDA Unit operations and lasting through the change of operational phase (*1) or the expiration date the permittee is authorized to discharge from:

Internal Outfall 31A(*1), the discharge of treated sanitary wastewater (estimated flow is 0.032 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/ month	Estimate
BOD_5	00310	---	---	--	45	1/ month	Grab
TSS	00530	---	---	---	45	1/ month	Grab
Fecal Coliform colonies/100 ml	74055	---	---	---	400	1/ month	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 31A, at the point of discharge from the treatment facility prior to combining with the waters of Final Outfall C10 or G10.

FOOTNOTE(S):

(*1) DMRs must be submitted for EACH operational phase that occurs during the same monitoring period. Please note, this may result in multiple sets of DMRs in one submittal.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 019, the intermittent discharge of low contamination potential stormwater runoff from manufacturing and support areas; de minimis non-process area utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage; and previously monitored hydrostatic test wastewater(s) from Internal Outfall 500.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
Total Copper	01042	---	---	Report	Report	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 019, at the point of discharge into the drainage ditch on the northeast corner, prior to commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 020, the intermittent discharge of stormwater runoff from manufacturing and support areas and former Outfall 016; previously monitored hydrostatic test wastewater(s) from Internal Outfall 500; and utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
Total Copper	01042	---	---	Report	Report	1/quarter	Grab
Nitrate Nitrogen	00621	---	---	5	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 020, at the point of discharge into the plant slip east of the Ammonia Dock, prior to commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When Discharging

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 022, the intermittent discharge of low contamination potential stormwater runoff from manufacturing and support areas; intermittent overflow from the TDI Incinerator emergency fire deluge system; de minimis quantities of non-process utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage; and previously monitored hydrostatic test wastewaters from Internal Outfall 500.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
Ammonia (as N)	00610	---	---	10	30	1/quarter	Grab
Organic Nitrogen	51020	---	---	10	30	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 022, at the point of discharge into the plant slip west of the Shell Barge Dock, prior to commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 025, the intermittent discharge of low contamination potential stormwater runoff from manufacturing and support areas; de minimis quantities of non-process utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage; and previously monitored hydrostatic test wastewaters from Internal Outfall 500.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 025, at the point of discharge prior to entering Bayou Verdine and/or commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 026, the intermittent discharge of stormwater runoff from manufacturing and support areas; previously monitored hydrostatic test wastewater(s) from Internal Outfall 500; and utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0(*2) (Min)	9.0(*2) (Max)	1/quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 026, at the point of discharge prior to entering Bayou Verdine and/or commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When Discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 029, the intermittent discharge of low contamination potential stormwater runoff from the east side of the closed West Pond, wastewater treatment plant area, and sheet flow from the access road; periodic diversion of wastewater during preventative maintenance activities for sumps X-303 (Powerhouse boiler blowdown and oil sump wastewaters and pilot plant) and X-307 (cooling water blowdown from TDI and TDA); non-process area utility wastewaters including, but not limited to steam condensate from steam traps, supply well head leakage, and fire monitor leakage; and a dilute mixture of wastewater and stormwater from sump X-201 (to be used during periods of heavy rain or unusual hydraulics conditions, after first flush of a quarter inch of rainfall has been collected and pumped to the non-biological treatment system); and previosuly monitored hydrostatic test waste water from Internal Outfall 500.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	Report	70	1/quarter	Grab
Oil and Grease	03582	---	---	Report	15	1/quarter	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0(*2) (Min)	9.0(*2) (Max)	1/quarter	Grab

WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*3)(*4)	STORET Code (*5)			(Percent %, UNLESS STATED) Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TLP6B	---	---	Report	Report	1/quarter	*24-hour Composite*
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Menidia beryllina	TOP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TPP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Menidia beryllina	TGP6B	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Menidia beryllina	TQP6B	---	---	Report	Report	1/quarter	24-hour Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 029 continued)

Effluent Characteristic		Discharge Limitations		Other units (Percent %, UNLESS STATED)		Monitoring Requirements	
WHOLE EFFLUENT (CHRONIC) TOXICITY TESTING (*3)(*4)	STORET Code (*5)			Monthly Avg Minimum	7-Day Minimum	Measurement Frequency	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Mysidopis bahia	TLP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Mysidopis bahia	TOP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TPP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Mysidopis bahia	TGP3E	---	---	Report	Report	1/quarter	24-hour Composite
NOEC, Value [%], Coeffiecient of Variation, Static Renewal, 7-Day Chronic, Mysidopsis bahia	TQP3E	---	---	Report	Report	1/quarter	24-hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 029, at the point of discharge into the plant slip prior to commingling with any other wastewaters.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

(*3) Reporting Outfall will be 029. Results shall be reported on DMR as Outfall T29.

(*4) See Part II.U for biomonitoring requirements.

(*5) Given test method or other, as approved at 40 CFR part 136.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Internal Outfall 500, the intermittent discharge of hydrostatic test wastewater

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/Discharge Event	Estimate
TSS (*2)	00530	---	---	---	90	1/Discharge Event	Grab
Oil & Grease	03582	---	---	---	15	1/Discharge Event	Grab
TOC(*3)	00680	---	---	---	50	1/Discharge Event	Grab
Benzene(*3)	34030	---	---	---	50 µg/L	1/Discharge Event	Grab
Total BTEX (*3 & 4)	30383	---	---	---	250 µg/L	1/Discharge Event	Grab
Total Lead (*3)	01051	---	---	---	50 µg/L	1/Discharge Event	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Internal Outfall 500, at the point of discharge from the vessel or pipeline being tested prior to combining with any other waters.

This wastewater can be discharged through any Final Outfall.

FOOTNOTE(S):

(*1) When discharging

(*2) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.

(*3) Total Organic Carbon (TOC) shall be measured on discharges from facilities which have previously been in service; i.e., those facilities which are not new. Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipelines or vessels which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Accordingly, Flow, TSS, Oil and Grease, and pH are the only testing requirements for new pipe or vessels.

(*4) BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, and total xylene (including ortho-, meta-, and para-xylene) as quantified by EPA methods 601, 602, 624, or 1624

PART II

OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the Office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

A. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations or additional restrictions, if necessary, to maintain the water quality integrity and the designated uses of the receiving water bodies.

B. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.

C. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.

D. For definitions of monitoring and sampling terminology see Part III, Section F.

E. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

METALS
Total Copper
Total Nickel
Total Mercury
Total Lead

VOLATILE COMPOUNDS
Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-trans-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
Ethylbenzene
Methyl Chloride
Methylene Chloride

OTHER REQUIREMENTS (continued)

Tetrachloroethylene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

ACID COMPOUNDS
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Phenol

BASE NEUTRAL COMPOUNDS
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(k)fluoranthene
Bis(2-ethylhexyl)phthalate
Chrysene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Naphthalene
Nitrobenzene
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

OTHER REQUIREMENTS (continued)

F. COMPOSITE SAMPLING (24-HOUR)

1. STANDARD PROVISIONS

Unless otherwise specified in this permit, the term "24-hour composite sample" means a sample consisting of a minimum of four (4) aliquots of effluent collected at regular intervals over a normal 24-hour operating day and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

2. VOLATILE COMPOUNDS

For the "24-hour composite" sampling of volatile compounds using EPA Methods 601, 602, 603, 624, 1624, or any other 40 CFR Part 136 (See LAC 33:IX.4901) method approved after the effective date of the permit, the permittee shall manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. These aliquots must be combined in the laboratory to represent the composite sample of the discharge. One of the following alternative methods shall be used to composite these aliquots.

a. Each aliquot is poured into a syringe. The plunger is added, and the volume in the syringe is adjusted to 1-1/4 ml. Each aliquot (1-1/4 ml.) is injected into the purging chamber of the purge and trap system. After four (4) injections (total 5 ml.), the chamber is purged. Only one analysis or run is required since the aliquots are combined prior to analysis.

b. Chill the four (4) aliquots to 4 Degrees Centigrade. These aliquots must be of equal volume. Carefully pour the contents of each of the four aliquots into a 250-500 ml. flask which is chilled in a wet ice bath. Stir the mixture gently with a clean glass rod while in the ice bath. Carefully fill two (2) or more clean 40 ml. zero head-space vials from the flask and dispose of the remainder of the mixture. Analyze one of the aliquots to determine the concentration of the composite sample. The remaining aliquot(s) are replicate composite samples that can be analyzed if desired or necessary.

c. Alternative sample compositing methods may be used following written approval by this Office.

The individual samples resulting from the application of these compositing methods shall be analyzed following the procedures specified for the selected test method. The resulting analysis shall be reported as the daily composite concentration.

As an option to the above compositing methods, the permittee may manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour

OTHER REQUIREMENTS (continued)

sampling period using sample collection, preservation, and handling techniques specified in the test method. A separate analysis shall be conducted for each discrete grab sample following the approved test methods. The determination of daily composite concentration shall be the arithmetic average (weighted by flow) of all grab samples collected during the 24-hour sampling period.

G. 40 CFR PART 136 (See LAC 33:IX.4901) ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136, and in particular, Appendices A, B, and C (See LAC 33:IX.4901).

H. FLOW MEASUREMENT "ESTIMATE" SAMPLE TYPE

If the flow measurement sample type in Part I is specified as "estimate", flow measurements shall not be subject to the accuracy provisions established at Part III.C.6 of this permit. The daily flow value may be estimated using best engineering judgement.

I. pH RANGE EXCURSION PROVISIONS

Where a permittee continuously measures the pH of wastewater as a requirement or option in a Louisiana Pollutant Discharge Elimination System (LPDES) permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and

2. No individual excursion from the range of pH values shall exceed 60 minutes.

For the purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the permit.

J. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

NONCONVENTIONAL	MQL (ug/L)
Phenolics, Total Recoverable (4AAP)	5
Chlorine (Total Residual)	100
3-Chlorophenol	10
4-Chlorophenol	10

OTHER REQUIREMENTS (continued)

2,3-Dichlorophenol	10
2,5-Dichlorophenol	10
2,6-Dichlorophenol	10
3,4-Dichlorophenol	10
2,4-D	10
2,4,5-TP (Silvex)	4

METALS AND CYANIDE	MQL (µg/L)
Antimony (Total)	60
Arsenic (Total)	10
Beryllium (Total)	5
Cadmium (Total)	1
Chromium (Total)	10
Chromium (3+)	10
Chromium (6+)	10
Copper (Total)	10
Lead (Total)	5
Mercury (Total)	0.2
Molybdenum (Total)	30
Nickel (Total) Freshwater	40
Nickel (Total) Marine	5
Selenium (Total)	5
Silver (Total)	2
Thallium (Total)	10
Zinc (Total)	20
Cyanide (Total)	20

DIOXIN	MQL (µg/L)
2,3,7,8-TCDD	0.00001

VOLATILE COMPOUNDS	MQL (µg/L)
Acrolein	50
Acrylonitrile	50
Benzene	10
Bromoform	10
Carbon Tetrachloride	10
Chlorobenzene	10
Chlorodibromomethane	10
Chloroethane	50
2-Chloroethylvinylether	10
Chloroform	10
Dichlorobromomethane	10
1,1-Dichloroethane	10
1,2-Dichloroethane	10
1,1-Dichloroethylene	10
1,2-Dichloropropane	10
1,3-Dichloropropylene	10
Ethylbenzene	10
Methyl Bromide [Bromomethane]	50
Methyl Chloride [Chloromethane]	50
Methylene Chloride	20

OTHER REQUIREMENTS (continued)

1,1,2,2-Tetrachloroethane	10
Tetrachloroethylene	10
Toluene	10
1,2-trans-Dichloroethylene	10
1,1,1-Trichloroethane	10
1,1,2-Trichloroethane	10
Trichloroethylene	10
Vinyl Chloride	10

ACID COMPOUNDS	MQL (ug/L)
2-Chlorophenol	10
2,4-Dichlorophenol	10
2,4-Dimethylphenol	10
4,6-Dinitro-o-Cresol [2-Methyl-4,6-Dinitrophenol]	50
2,4-Dinitrophenol	50
2-Nitrophenol	20
4-Nitrophenol	50
p-Chloro-m-Cresol [4-Chloro-3-Methylphenol]	10
Pentachlorophenol	50
Phenol	10
2,4,6-Trichlorophenol	10

BASE/NEUTRAL COMPOUNDS	MQL (ug/L)
Acenaphthene	10
Acenaphthylene	10
Anthracene	10
Benzidine	50
Benzo(a)anthracene	10
Benzo(a)pyrene	10
3,4-Benzofluoranthene	10
Benzo(ghi)perylene	20
Benzo(k)fluoranthene	10
Bis(2-chloroethoxy) Methane	10
Bis(2-chloroethyl) Ether	10
Bis(2-chloroisopropyl) Ether	10
Bis(2-ethylhexyl) Phthalate	10
4-Bromophenyl Phenyl Ether	10
Butylbenzyl Phthalate	10
2-Chloronapthalene	10
4-Chlorophenyl Phenyl Ether	10
Chrysene	10
Dibenzo(a,h)anthracene	20
1,2-Dichlorobenzene	10
1,3-Dichlorobenzene	10
1,4-Dichlorobenzene	10
3,3'-Dichlorobenzidine	50
Diethyl Phthalate	10
Dimethyl Phthalate	10
Di-n-Butyl Phthalate	10
2,4-Dinitrotoluene	10
2,6-Dinitrotoluene	10

OTHER REQUIREMENTS (continued)

Di-n-octyl Phthalate	10
1,2-Diphenylhydrazine	20
Fluoranthene	10
Fluorene	10
Hexachlorobenzene	10
Hexachlorobutadiene	10
Hexachlorocyclopentadiene	10
Hexachloroethane	20
Indeno(1,2,3-cd)pyrene [2,3-o-Phenylene Pyrene]	20
Isophorone	10
Naphthalene	10
Nitrobenzene	10
n-Nitrosodimethylamine	50
n-Nitrosodi-n-Propylamine	20
n-Nitrosodiphenylamine	20
Phenanthrene	10
Pyrene	10
1,2,4-Trichlorobenzene	10

PESTICIDES	MQL (µg/L)
Aldrin	0.05
Alpha-BHC	0.05
Beta-BHC	0.05
Gamma-BHC [Lindane]	0.05
Delta-BHC	0.05
Chlordane	0.2
4,4'-DDT	0.1
4,4'-DDE [p,p-DDX]	0.1
4,4'-DDD [p,p-TDE]	0.1
Dieldrin	0.1
Alpha-Endosulfan	0.1
Beta-Endosulfan	0.1
Endosulfan Sulfate	0.1
Endrin	0.1
Endrin Aldehyde	0.1
Heptachlor	0.05
Heptachlor Epoxide [BHC-Hexachlorocyclohexane]	0.05
PCB-1242	1.0
PCB-1254	1.0
PCB-1221	1.0
PCB-1232	1.0
PCB-1248	1.0
PCB-1260	1.0
PCB-1016	1.0
Toxaphene	5.0

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40 CFR Part 136 (See LAC 33:IX.4901). For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to this Office a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate

OTHER REQUIREMENTS (continued)

that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by this Office, the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

K. The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule:

Effective date of the permit and per schedules listed in Parts II.L and II.M

L. EFFLUENT LIMITS AND REPORTING REQUIREMENTS FOR TMDL PARAMETERS

Interim effluent limits are proposed to commence on the effective date of the permit and expire on June 12, 2008.

Interim effluent reporting requirements:

Outfall 010 or D10	
• Total Copper	Report lbs/day daily average
• Total Mercury	Report lbs/day daily average
• Benzo (a) anthracene	0.2000 lbs/day daily average
	0.5200 lbs/day daily maximum
• Benzo (a) pyrene	0.2100 lbs/day daily average
	0.5300 lbs/day daily maximum
Outfall A10 or E10	
• Total Copper	Report lbs/day daily average
• Total Mercury	Report lbs/day daily average
• Benzo (a) anthracene	0.1957 lbs/day daily average
	0.4841 lbs/day daily maximum
• Benzo (a) pyrene	0.2060 lbs/day daily average
	0.4944 lbs/day daily maximum
Outfall B10 or F10	
• Total Copper	Report lbs/day daily average
• Total Mercury	Report lbs/day daily average
• Benzo (a) anthracene	0.1472 lbs/day daily average
	0.3641 lbs/day daily maximum
• Benzo (a) pyrene	0.1550 lbs/day daily average
	0.3719 lbs/day daily maximum

OTHER REQUIREMENTS (continued)

Outfall C10 or G10

• Total Copper	Report lbs/day daily average
• Total Mercury	Report lbs/day daily average
• Benzo (a) anthracene	0.3200 lbs/day daily average
	0.8100 lbs/day daily maximum
• Benzo (a) pyrene	0.3300 lbs/day daily average
	0.8300 lbs/day daily maximum

The final effluent limits commence on June 13, 2008.

The final effluent schedule will require the following limitations:

Outfalls 010, A10, B10, C10, D10, E10, F10 and/or G10

• Total Copper	4.5900 lbs/day daily maximum
• Total Mercury	0.0316 lbs/day daily maximum
• Benzo (a) anthracene	0.3090 lbs/day daily maximum
• Benzo (a) pyrene	0.3090 lbs/day daily maximum

The TMDL assigned allocations for daily max monitoring only. There are no requirements placed on these parameters for monthly average monitoring.

The permittee may choose to use Clean Techniques for monitoring Total Copper and Total Mercury, however, use of this technique is optional as long as Lyondell uses an approved EPA method for analysis.

Federal regulations under 40 CFR 130.7 require the State to incorporate all final TMDLs into its current Water Quality Management Plan (WQMP). The State is also required to ensure consistency with the WQMP requirements approved by EPA under Section 208(b) of the Clean Water Act (CWA), as cited under LAC 33.IX.2707.D.6. Since the requirements established in the Final TMDL (Federal Register Notice: Volume 67, Number 114, pages 40735 - 40737, 6/13/2002) are water quality-based effluent limitations that are part of the State's current Water Quality Management Plan (Volume 8), and are more stringent than the technology based effluent limitations, the TMDL waste load allocations must remain in the permit.

M. COMPLIANCE SCHEDULE FOR NON-TMDL PARAMETERS AT OUTFALLS 010, A10, B10, C10, D10, E10, F10, and G10

Under the existing LPDES permit, Outfall 010 discharges to the Calcasieu River via Coon Island Loop. The applicant has proposed to move the location of this outfall to the Main Stem of the Calcasieu River in order to achieve compliance with water quality standards. In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. This applies to Outfalls 010, A10, B10, C10, D10, E10, F10, and G10.

OTHER REQUIREMENTS (continued)

Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Outfall 010** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-2), beginning on June 13, 2008:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Total Nickel	1.8441	4.3780
Hexachlorobenzene	0.0003	0.0006
Hexachlorabutadiene	0.0397	0.0943
Carbon Tetrachloride	1.1100(*)	2.9018
1,3 -Dichloropropylene	1.5400(*)	4.6581

(*) The Monthly Average technology based effluent limitation was more stringent than the water quality based effluent limitation, therefore, in accordance with LAC 33:IX.2707.D.5 more stringent limitation has been applied.

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall A10** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-4), beginning on June 13, 2008 (while plant is using non-biological treatment) with TDI non-operational and TDA operational and lasting through the startup of another operational phase, the relocation of this outfall to the Main Channel of the Calcasieu River, or the expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Total Nickel	1.8441	4.3780
Hexachlorobenzene	0.0003	0.0006
Hexachlorabutadiene	0.0397	0.0943
Carbon Tetrachloride	1.2193	2.9018
1,3 -Dichloropropylene	1.9621	4.6581

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall B10** (in addition to the water quality limitations addressed

OTHER REQUIREMENTS (continued)

in the Calcasieu TMDL, see Appendix B-6), beginning on June 13, 2008 (while plant is using non-biological treatment) with TDA and TDI non-operational and lasting through the startup of another operational phase, the relocation of this outfall to the Main Channel of the Calcasieu River, or the expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Hexachlorobenzene	0.0003	0.0006
Hexachlorabutadiene	0.0381	0.0904
Carbon Tetrachloride	1.1002 (*)	2.8948
1,3 -Dichloropropylene	1.5186 (*)	4.4646

(*) The Monthly Average technology based effluent limitation was more stringent than the water quality based effluent limitation, therefore, in accordance with LAC 33:IX.2707.D.5 more stringent limitation has been applied.

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall C10** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-8), beginning on June 13, 2008 (while plant is using biological treatment) where TDI and TDA are operational and lasting through the startup of another operational phase, the relocation of this outfall to the Main Channel of the Calcasieu River or the expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Total Nickel	2.0131	4.7792
Hexachlorobenzene	0.0003	0.0006
Hexachlorabutadiene	0.0434	0.1030
Carbon Tetrachloride	1.2258	2.9173
1,3 -Dichloropropylene	2.1000 (*)	5.0849

(*) The Monthly Average technology based effluent limitation was more stringent than the water quality based effluent limitation, therefore, in accordance with LAC 33:IX.2707.D.5 more stringent limitation has been applied.

OTHER REQUIREMENTS (continued)

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall D10** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-3), beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (while plant is using biological treatment) and TDI is non-operational and TDA is operational and lasting through the startup of another operational phase or permit expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Hexachlorobenzene	0.0049	0.0116
Hexachlorabutadiene	0.1633	0.3877

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall E10** (in addition to the water quality limitations addressed in the Calcasieu TMDL,. see Appendix B-5), beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (while plant is using non-biological treatment) and TDI is non-operational and TDA is operational and lasting through the startup of another operational phase or the expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Hexachlorobenzene	0.0049	0.0116
Hexachlorabutadiene	0.1633	0.3877

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall F10** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-7), beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (while plant is using non-biological treatment) and TDA and TDI are non-operational and lasting through the startup of another operational phase or the expiration date:

OTHER REQUIREMENTS (continued)

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Hexachlorobenzene	0.0049	0.0116
Hexachlorabutadiene	0.1616	0.3837

In accordance with LAC 33:IX.1109.D.1., the Department of Environmental Quality has granted Lyondell Chemical Company until June 12, 2008 to come into compliance with current water quality standards. Lyondell Chemical Company will be subject to the following **Water Quality Based Limitations at Proposed Outfall G10** (in addition to the water quality limitations addressed in the Calcasieu TMDL, see Appendix B-9), beginning on June 13, 2008, after the relocation of Outfall 010, A10, B10, or C10 into the Main Channel of the Calcasieu River (while the plant is using biological treatment) and TDA and TDI are operational and lasting through the startup of another operational phase or the expiration date:

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Total Nickel	7.7467	18.3911
Hexachlorobenzene	0.0049	0.0117
Hexachlorabutadiene	0.1669	0.3963

N. LIMITATION FOR AMMONIA (as N) AT OUTFALLS 010, A10, B10, C10, D10, E10, F10, AND G10

Two Ammonia Nitrogen limitation have been placed on these outfalls. These limitations were established to represent periods of low ammonia nitrogen discharge that may occur during operating conditions 1-4 and higher ammonia nitrogen discharges that may occur during operation of condition 5.

Condition 1 - no hydrazine production underway
Condition 2 - only ketazine production underway
Condition 3 - unsymmetrical dimethyl hydrazine (UDMH)and ketazine production underway
Condition 4 - anhydrous hydrazine (AH) production underway
Condition 5 - monomethyl hydrazine (MMH) and ketazine production underway

PARAMETER	MONTHLY AVERAGE LBS/DAY	DAILY MAXIMUM LBS/DAY
Ammonia Nitrogen (Conditions 1-4)	495	743
Ammonia Nitrogen (Condition 5)	1571	2907

OTHER REQUIREMENTS (continued)

O. PERMIT REOPENER CLAUSE

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit; or

3. Require reassessment due to change in 303(d) status of waterbody; or

4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

P. STORMWATER DISCHARGES

1. This section applies to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The purpose of the pollution prevention plan is to identify potential sources of pollution that would reasonably be expected to affect the quality of stormwater and identify the practices that will be used to prevent or reduce the pollutants in stormwater discharges.

2. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraph 4 below.

3. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective

OTHER REQUIREMENTS (continued)

date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. If the permittee maintains other plans that contain duplicative information, that plan could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasure Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. EPA document 833-R-92-006 (Storm Water Management for Industrial Activities) may be used as a guidance and may be obtained by writing to the Water Resource Center (RC_4100), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington D.C. 20460 or by calling (202) 566-1729 or via the Wetlands Helpline (800) 832-7828.

4. The following conditions are applicable to all facilities and shall be included in the SWP3 for the facility.

   a. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed.

   b. The permittee shall develop a site map which includes all areas where stormwater may contact potential pollutants or substances which can cause pollution. Any location where reportable quantities leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff.

   c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

   d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspector(s), conditions found, and changes to be made to the SWP3.

   e. The summary report and the following certification shall be signed in accordance with LAC 33:IX.2503. The summary report is to be attached to the SWP3 and provided to the Department upon request.

OTHER REQUIREMENTS (continued)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signatory requirements for the certification may be found in Part III, Section D.10 of this permit.

f. The permittee shall make available to the Department, upon request, a copy of the SWP3 and any supporting documentation.

5. The following shall be included in the SWP3, if applicable.

a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:

i. maintaining adequate roads and driveway surfaces;
ii. removing debris and accumulated solids from the drainage system; and
iii. cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods.

b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery work surface) except where the cleanup practice does not result in a discharge and does not leave residues exposed to future storm events. In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.

c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.

d. All waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.

OTHER REQUIREMENTS (continued)

e. If applicable, all storage tank installations (with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area) shall be constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills.

f. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. All drains from diked areas shall be equipped with valves which shall be kept in the closed condition except during periods of supervised discharge.

g. All check valves, tanks, drains, or other potential sources of pollutant releases shall be inspected and maintained on a regular basis to assure their proper operation and to prevent the discharge of pollutants.

h. The permittee shall assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (L.R.S. 30:2151, etc.). Management practices required under above regulations shall be referenced in the SWP3.

i. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

j. If the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.

6. Facility Specific SWP3 Conditions:

None

Q. PROPOSED DISCHARGE NOTIFICATION

Prior approval shall be obtained from this Office for any new proposed discharges at the site.

R. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must

OTHER REQUIREMENTS (continued)

be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is a no discharge event at any of the monitored outfall(s) during the reporting period, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report.

Reporting periods shall end on the last day of the month. Monitoring results for each month shall be summarized on a Discharge Monitoring Report (DMR) Form and submitted to this Department per schedule below, postmarked no later than the 15th day of the month following each reporting period.

Permittees shall be required to submit DMR's according to the following schedule or as established in the permit:

For parameter(s) with monitoring frequency(ies) of 1/month or more frequent:

Submit DMR postmarked by the 15th day of the following month.

For parameter(s) with monitoring frequency(ies) of 1/quarter:

Monitoring Period	DMR Postmark Date
January 1 - March 31	April 15th
April 1 - June 30	July 15th
July 1 - September 30	October 15th
October 1 - December 31	January 15th

For parameter(s) with monitoring frequency(ies) of semi-annual:

Monitoring Period	DMR Postmark Date
January 1 - June 30	July 15th
July 1 - December 31	January 15th

For parameter(s) with monitoring frequency(ies) of 1/year:

Monitoring Period	DMR Postmark Date
January 1 - December 31	January 15th

The monitoring results for each hydrostatic test (Outfall 500) shall be summarized and reported on a DMR form, and submitted to this Office on a quarterly basis, as per the schedule above. **A DMR must be submitted quarterly even if there were no discharges during that monitoring period.** If there is no discharge during the sampling period, one DMR may be submitted with "No Discharge" written in the upper right corner of the DMR.

Duplicate copies of DMR's (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set

OTHER REQUIREMENTS (continued)

of originals) required by this permit shall be submitted to the Permit Compliance Unit at the following address:

Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

S. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC MARINE) INTERIM SCHEDULE FOR OUTFALLS 010, A10, B10, AND C10 (PRIOR TO OUTFALL RELOCATION AND JUNE 12, 2008.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	010, A10, B10, and C10
REPORTED ON DMR AS OUTFALL: Outfalls 010, A10, B10, and C10	T10
CRITICAL DILUTION	
*Outfall 010	7%
*Outfall A10	7%
*Outfall B10	7%
*Outfall C10	9%
EFFLUENT DILUTION SERIES	
*Outfall 010	3%, 4%, 6%, 7%, and 10%
*Outfall A10	3%, 4%, 6%, 7%, and 10%
*Outfall B10	3%, 4%, 5%, 7%,and 9%
*Outfall C10	4%, 5%, 7%, 9%, and 12%
COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136 (See LAC 33:IX.4901)

Mysidopsis bahia (Mysid shrimp) chronic static renewal 7-day survival and growth test using Method 1007.0, EPA-821-R-02-014, or the most recent update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

OTHER REQUIREMENTS (continued)

Menidia beryllina (Inland Silverside minnow) chronic static renewal 7-day larval survival and growth test, Method 1006.0, EPA-821-R-02-014, or the most recent update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this section apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

a. Part I Testing Frequency Other Than Monthly

i. The permittee shall conduct a total of two (2) additional tests for any species that demonstrates significant lethal effects at or below the critical dilution. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two additional tests in lieu of routine toxicity testing, unless the specified testing frequency for the species demonstrating significant lethal effects is monthly. The full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

ii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section. The permittee shall notify this Office within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects

OTHER REQUIREMENTS (continued)

at or below the critical dilution, or for failure to perform the required retests

iii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the frequency of testing for this species shall be once per quarter for the life of the permit.

iv. The provisions of item 2.a are suspended upon completion of the two additional tests and submittal of the TRE Action Plan.

b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at the critical dilution. A TRE may be also required due to a demonstration of persistent significant sub-lethal effects or intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean dry weight of surviving Mysid shrimp at the end of the 7 days in the control (0% effluent) must be 0.20 mg per mysid or greater. Should the mean dry weight in the control be less than 0.20 mg per mysid, the toxicity test, including the control and all effluent dilutions shall be repeated.

iii. The mean dry weight of surviving unpreserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.50 mg per larva or greater. The mean dry weight of surviving preserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.43 mg per larva or greater.

iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

OTHER REQUIREMENTS (continued)

v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Mysid shrimp and the Inland Silverside minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA 821-R-02-014, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and salinity to the closest downstream perennial water for;

(A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

(B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

OTHER REQUIREMENTS (continued)

(A) a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and

(D) the synthetic dilution water shall have a pH, hardness and salinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third 24-hour composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days

OTHER REQUIREMENTS (continued)

if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

4. REPORTING

a. A valid test must be submitted during the reporting period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA 821-R-02-014, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

b. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with Part III.D of this permit. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 and Table 2 summary sheets with each valid test.

i. Menidia beryllina (Inland Silverside minnow)

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B.

(B) Report the NOEC value for survival, Parameter No. TOP6B.

(C) Report the NOEC value for growth, Parameter No. TPP6B.

(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6B.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6B.

OTHER REQUIREMENTS (continued)

ii. Mysidopsis bahia (Mysid shrimp)

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E.

(B) Report the NOEC value for survival, Parameter No. TOP3E.

(C) Report the NOEC value for growth, Parameter No. TPP3E.

(D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3E.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3E.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that reporting period.

(A) Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."

(B) Retest #1 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."

If, for any reason, a retest cannot be performed during the reporting period in which the triggering routine test failure is experienced, the permittee shall report it on the following reporting period's DMR, and the comments section of both DMRs shall be annotated to that effect. If retesting is not required during a given reporting period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Tables 1 and 2 of this permit with the DMR subsequent to each and every toxicity test reporting period. The DMR and the summary tables should be sent to the address indicated in 4.a. The permittee is not required to send the first complete report nor summary tables to EPA.

OTHER REQUIREMENTS (continued)

5. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean dry weight of surviving Mysid shrimp at the end of the 7 days in the control (0% effluent) must be 0.20 mg per mysid or greater. Should the mean dry weight in the control be less than 0.20 mg per mysid, the toxicity test, including the control and all effluent dilutions shall be repeated.

iii. The mean dry weight of surviving unpreserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.50 mg per larva or greater. The mean dry weight of surviving preserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.43 mg per larva or greater.

iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Mysid shrimp and the Inland Silverside minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-014, or the most recent update thereof.

OTHER REQUIREMENTS (continued)

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and salinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A) a synthetic dilution water control which fulfills the test acceptance requirements of item 2.a was run concurrently with the receiving water control;

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 3.a below; and

(D) the synthetic dilution water shall have a pH, hardness and salinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined

OTHER REQUIREMENTS (continued)

proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping, and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 3 of this section.

6. REPORTING

a. A valid test must be submitted during each reporting period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA-821-R-02-014, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

OTHER REQUIREMENTS (continued)

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

b. The permittee shall report the Whole Effluent Lethality values for the 30-Day Average Minimum and the 7-Day Minimum under Parameter No. 22414 on the DMR for that reporting period in accordance with Part III.D of this permit.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

If more than one species is tested during the reporting period, the permittee shall report the lowest 30-Day Average Minimum NOEC and the lowest 7-Day Minimum NOEC for Whole Effluent Lethality.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for LDEQ review.

c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period in accordance with Part III.D of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. Menidia beryllina (Inland Silverside minnow)

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B.

(B) Report the NOEC value for survival, Parameter No. TOP6B.

(C) Report the NOEC value for growth, Parameter No. TPP6B.

OTHER REQUIREMENTS (continued)

(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6B.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6B.

ii. Mysidopsis bahia (Mysid shrimp)

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E.

(B) Report the NOEC value for survival, Parameter No. TOP3E.

(C) Report the NOEC value for growth, Parameter No. TPP3E.

(D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3E.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3E.

The permittee shall submit the toxicity testing information contained in Tables 1 and 2 of this permit with the DMR subsequent to each and every toxicity test reporting period. The DMR and the summary table should be sent to the address indicated in 3.a. The permittee is not required to send the first complete report nor summary tables to EPA.

7. ADDITIONAL TOXICITY CONSIDERATIONS

LDEQ offers the **suggestion** that Lyondell begin investigation if a toxicity failure (lethal and/or sub-lethal) is experienced to either species from these outfalls to determine those actions necessary to achieve compliance with water quality based effluent limits by reducing effluent toxicity to an acceptable level. This investigation may include a process which combines toxicity testing and analysis of the physical and chemical characteristics of a toxic effluent to identify the constituents causing the toxicity and/or treatment methods which will reduce effluent toxicity. The goal of this investigation would be to lead to successful identification of a toxicant and subsequent elimination of effluent toxicity at the proposed critical dilutions.

Please be advised that if the new outfall relocation is not completed and the permittee continues to discharge from Outfall 010, A10, B10, and/or C10, a Whole Effluent Toxicity (WET) limitation will be implemented and become effective on June 13, 2008.

OTHER REQUIREMENTS (continued)

T. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC MARINE) FINAL SCHEDULE FOR OUTFALLS 010, A10, B10, AND C10 (PRIOR TO OUTFALL RELOCATION AND AFTER JUNE 12, 2008.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	010, A10, B10, and C10
REPORTED ON DMR AS OUTFALL: Outfalls 010, A10, B10, and C10	T10

CRITICAL DILUTION AND WET LIMIT

*Outfall 010	7%
*Outfall A10	7%
*Outfall B10	7%
*Outfall C10	9%

EFFLUENT DILUTION SERIES

*Outfall 010	3%, 4%, 6%, 7%, and 10%
*Outfall A10	3%, 4%, 6%, 7%, and 10%
*Outfall B10	3%, 4%, 5%, 7%,and 9%
*Outfall C10	4%, 5%, 7%, 9%, and 12%

COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136 (See LAC 33:IX.4901)

Mysidopsis bahia (Mysid shrimp) chronic static renewal 7-day survival and growth test using Method 1007.0, EPA/600/4-91/003, or the most recent update thereof.

Menidia beryllina (Inland Silverside minnow) chronic static renewal 7-day larval survival and growth test, Method 1006.0, EPA/600/4-91/003, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

OTHER REQUIREMENTS (continued)

c. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effluent Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in part I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.

d. This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

e. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean dry weight of surviving Mysid shrimp at the end of the 7 days in the control (0% effluent) must be 0.20 mg per mysid or greater. Should the mean dry weight in the control be less than 0.20 mg per mysid, the toxicity test, including the control and all effluent dilutions shall be repeated.

iii. The mean dry weight of surviving unpreserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.50 mg per larva or greater. The mean dry weight of surviving preserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.43 mg per larva or greater.

iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

OTHER REQUIREMENTS (continued)

v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Mysid shrimp and the Inland Silverside minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-014, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and salinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A) a synthetic dilution water control which fulfills the test acceptance requirements of item 2.a was run concurrently with the receiving water control;

OTHER REQUIREMENTS (continued)

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 3.a below; and

(D) the synthetic dilution water shall have a pH, hardness and salinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping, and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal

OTHER REQUIREMENTS (continued)

protocol associated with the abbreviated sample collection must be documented in the full report required in item 3 of this section.

3. REPORTING

a. A valid test must be submitted during each reporting period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA-821-R-02-014, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

b. The permittee shall report the Whole Effluent Lethality values for the 30-Day Average Minimum and the 7-Day Minimum under Parameter No. 22414 on the DMR for that reporting period in accordance with Part III.D of this permit.

If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period.

If more than one species is tested during the reporting period, the permittee shall report the lowest 30-Day Average Minimum NOEC and the lowest 7-Day Minimum NOEC for Whole Effluent Lethality.

A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for LDEQ review.

OTHER REQUIREMENTS (continued)

c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period in accordance with Part III.D of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. Menidia beryllina (Inland Silverside minnow)

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B.

(B) Report the NOEC value for survival, Parameter No. TOP6B.

(C) Report the NOEC value for growth, Parameter No. TPP6B.

(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6B.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6B.

ii. Mysidopsis bahia (Mysid shrimp)

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E.

(B) Report the NOEC value for survival, Parameter No. TOP3E.

(C) Report the NOEC value for growth, Parameter No. TPP3E.

(D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3E.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3E.

The permittee shall submit the toxicity testing information contained in Tables 1 and 2 of this permit with the DMR subsequent to each and every toxicity test reporting period. The DMR and the summary table should be sent to the address indicated in 3.a. The permittee is not required to send the first complete report nor summary tables to EPA.

OTHER REQUIREMENTS (continued)

U. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC MARINE) FOR OUTFALLS 001, 008, 029, D10, E10, F10, AND G10

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	001, 008, D10, E10, F10, G10, and 029
REPORTED ON DMR AS OUTFALL:	
Outfall 001	TX1
Outfall 008	TX8
Outfalls D10, E10, F10, and G10	T10
Outfall 029	T29

CRITICAL DILUTION

*Outfall 001	6%
*Outfall 008	29%
*Outfall D10	1.2%
*Outfall E10	1.2%
*Outfall F10	1.1%
*Outfall G10	1.4%
*Outfall 029	100%

EFFLUENT DILUTION SERIES

*Outfall 001	2%, 3%, 4%, 6%, and 8%
*Outfall 008	12%, 16%, 22%, 29%, and 38%
*Outfall D10	0.5%, 0.7%, 0.9%, 1.2%, and 1.6%
*Outfall E10	0.5%, 0.7%, 0.9%, 1.2%, and 1.6%
*Outfall F10	0.5%, 0.6%, 0.8%, 1.1%, and 1.4%
*Outfall G10	0.6%, 0.8%, 1.1%, 1.4%, and 1.9%
*Outfall 029	32%, 42%, 56%, 75%, and 100%

COMPOSITE SAMPLE TYPE:	Defined at PART I
TEST SPECIES/METHODS:	40 CFR Part 136 (See LAC 33:IX.4901)

OTHER REQUIREMENTS (continued)

Mysidopsis bahia (Mysid shrimp) chronic static renewal 7-day survival and growth test using Method 1007.0, EPA 821-R-02-014, or the most recent update thereof.

Menidia beryllina (Inland Silverside minnow) chronic static renewal 7-day larval survival and growth test, Method 1006.0, EPA 821-R-02-014, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this section apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

a. Part I Testing Frequency Other Than Monthly

i. The permittee shall conduct a total of two (2) additional tests for any species that demonstrates significant lethal effects at or below the critical dilution. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two additional tests in lieu of routine toxicity testing, unless the specified testing frequency for the species demonstrating significant lethal effects is monthly. The full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

ii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section. The

OTHER REQUIREMENTS (continued)

permittee shall notify this Office within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests

iii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the frequency of testing for this species shall be once per quarter for the life of the permit.

iv. The provisions of item 2.a are suspended upon completion of the two additional tests and submittal of the TRE Action Plan.

b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at the critical dilution. A TRE may be also required due to a demonstration of persistent significant sub-lethal effects or intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean dry weight of surviving Mysid shrimp at the end of the 7 days in the control (0% effluent) must be 0.20 mg per mysid or greater. Should the mean dry weight in the control be less than 0.20 mg per mysid, the toxicity test, including the control and all effluent dilutions shall be repeated.

iii. The mean dry weight of surviving unpreserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.50 mg per larva or greater. The mean dry weight of surviving preserved Inland Silverside minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.43 mg per larva or greater.

OTHER REQUIREMENTS (continued)

iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the growth and survival endpoints in the Mysid shrimp test; and the growth and survival endpoints of the Inland Silverside minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Mysid shrimp and the Inland Silverside minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA 821-R-02-014, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and salinity to the closest downstream perennial water for;

(A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

(B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic

OTHER REQUIREMENTS (continued)

dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

(A) a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

(B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

(C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and

(D) the synthetic dilution water shall have a pH, hardness and salinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third 24-hour composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during

OTHER REQUIREMENTS (continued)

that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in item 1.a. above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

4. REPORTING

a. A valid test must be submitted during the reporting period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA 821-R-02-014, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

b. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with Part III.D of this permit. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 and Table 2 summary sheets with each valid test.

OTHER REQUIREMENTS (continued)

i. Menidia beryllina (Inland Silverside minnow)

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6B.

(B) Report the NOEC value for survival, Parameter No. TOP6B.

(C) Report the NOEC value for growth, Parameter No. TPP6B.

(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6B.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6B.

ii. Mysidopsis bahia (Mysid shrimp)

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3E.

(B) Report the NOEC value for survival, Parameter No. TOP3E.

(C) Report the NOEC value for growth, Parameter No. TPP3E.

(D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3E.

(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3E.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that reporting period.

(A) Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."

(B) Retest #1 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."

If, for any reason, a retest cannot be performed during the reporting period in which the triggering routine test failure is experienced, the permittee shall report it on the following

OTHER REQUIREMENTS (continued)

reporting period's DMR, and the comments section of both DMRs shall be annotated to that effect. If retesting is not required during a given reporting period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Tables 1 and 2 of this permit with the DMR subsequent to each and every toxicity test reporting period. The DMR and the summary tables should be sent to the address indicated in 4.a. The permittee is not required to send the first complete report nor summary tables to EPA.

5. TOXICITY REDUCTION EVALUATION (TRE)

a. Within ninety (90) days of confirming lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

OTHER REQUIREMENTS (continued)

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, Va. 22161

ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

c. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:

i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;

ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.

OTHER REQUIREMENTS (continued)

The TRE Activities Report shall be submitted to the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Avenue
Dallas, Texas 75202

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v) and state regulations at LAC 33:IX.2707.D.1.e.

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: 001
OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 6 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	2%	3%	4%	6%	8%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
2%							
3%							
4%							
6%							
8%							

TABLE 1(Outfall 001)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
_____ Yes _____ No
Is this a retest of a previous test failure?
_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL =_____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: 001
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 6 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
2%									
3%									
4%									
6%									
8%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
2%							
3%							
4%							
6%							
8%							

TABLE 2 (Outfall 001)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: 008
OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 29 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	P E R C E N T E F F L U E N T					
	0%	12%	16%	22%	29%	38%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
12%							
16%							
22%							
29%							
38%							

TABLE 1(Outfall 008)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: 008
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 29 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
12%									
16%									
22%									
29%									
38%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
12%							
16%							
22%							
29%							
38%							

TABLE 2(Outfall 008)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: 010
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	3%	4%	6%	7%	10%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
6%							
7%							
10%							

TABLE (Outfall 010)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
_____ Yes _____ No
Is this a retest of a previous test failure?
_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: 010
SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: _____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
3%									
4%									
6%									
7%									
10%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
6%							
7%							
10%							

TABLE 2 (Outfall 010)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

   _____ Yes _____ No
   Is this a retest of a previous test failure?

   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: A10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	P E R C E N T E F F L U E N T					
	0%	3%	4%	6%	7%	10%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
6%							
7%							
10%							

TABLE 1 (Outfall A10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: A10
SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
3%									
4%									
6%									
7%									
10%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
6%							
7%							
10%							

TABLE 2 (Outfall A10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: B10
OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	3%	4%	5%	7%	9%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
5%							
7%							
9%							

TABLE 1 (Outfall B10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: B10
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 7 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
3%									
4%									
5%									
7%									
9%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
3%							
4%							
5%							
7%							
9%							

TABLE 2 (Outfall B10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: C10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 9 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	P E R C E N T E F F L U E N T					
	0%	4%	5%	7%	9%	12%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
4%							
5%							
7%							
9%							
12%							

TABLE 1 (Outfall C10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: C10
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 9 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
4%									
5%									
7%									
9%									
12%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
4%							
5%							
7%							
9%							
12%							

TABLE 2 (Outfall C10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

   _____ Yes _____ No
   Is this a retest of a previous test failure?

   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: D10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.2 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	0.5%	0.7%	0.9%	1.2%	1.6%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.7%							
0.9%							
1.2%							
1.6%							

TABLE 1 (Outfall D10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
_____ Yes _____ No
Is this a retest of a previous test failure?
_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: D10
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.2 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
0.5%									
0.7%									
0.9%									
1.2%									
1.6%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.7%							
0.9%							
1.2%							
1.6%							

TABLE 2 (Outfall D10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

a. NOEC SURVIVAL =_____% effluent

b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: E10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.2 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	0.5%	0.7%	0.9%	1.2%	1.6%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.7%							
0.9%							
1.2%							
1.6%							

TABLE 1 (Outfall E10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: E10
SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 1.2 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV. %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
0.5%									
0.7%									
0.9%									
1.2%									
1.6%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.7%							
0.9%							
1.2%							
1.6%							

TABLE 2 (Outfall E10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

   _____ Yes _____ No
   Is this a retest of a previous test failure?

   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: F10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.1 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	0.5%	0.6%	0.8%	1.1%	1.4%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.6%							
0.8%							
1.1%							
1.4%							

TABLE 1 (Outfall F10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: F10
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.1 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
0.5%									
0.6%									
0.8%									
1.1%									
1.4%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.5%							
0.6%							
0.8%							
1.1%							
1.4%							

TABLE 2 (Outfall F10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

   a. NOEC SURVIVAL = _____% effluent

   b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: G10
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.4 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	P E R C E N T E F F L U E N T					
	0%	0.6%	0.8%	1.1%	1.4%	1.9%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.6%							
0.8%							
1.1%							
1.4%							
1.9%							

TABLE 1 (Outfall G10)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: G10
SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 1.4 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
0.6%									
0.8%									
1.1%									
1.4%									
1.9%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
0.6%							
0.8%							
1.1%							
1.4%							
1.9%							

TABLE 2 (Outfall G10)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC GROWTH = _____% effluent

TABLE 1
SUMMARY SHEET
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE: _____
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER: _____
OUTFALL IDENTIFICATION: 029
OUTFALL SAMPLE IS FROM _____ SINGLE _____ MULTIPLE DISCHARGE
BIOMONITORING LABORATORY: _____
DILUTION WATER USED: _____ RECEIVING WATER _____ LAB WATER
CRITICAL DILUTION 100 % DATE TEST INITIATED: _____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL - Mysidopsis

TIME OF READING	PERCENT EFFLUENT					
	0%	32%	42%	56%	75%	100%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution:?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Mysidopsis

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
32%							
42%							
56%							
75%							
100%							

TABLE 1 (Outfall 029)
SUMMARY SHEET CONTINUED
Mysidopsis bahia SURVIVAL AND REPRODUCTION TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
   _____ Yes _____ No
   If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?
   _____ Yes _____ No
   Is this a retest of a previous test failure?
   _____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Mysidopsis:

   a. NOEC SURVIVAL = _____ % effluent

   b. NOEC GROWTH = _____ % effluent

TABLE 2
SUMMARY SHEET
Menidia beryllina SURVIVAL AND GROWTH TEST

PERMITTEE: Lyondell Chemical Company
FACILITY SITE:
NPDES PERMIT NUMBER: LA0005347, 27051 WP PERMIT NUMBER:
OUTFALL IDENTIFICATION: 029
SAMPLE IS FROM SINGLE MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:
DILUTION WATER USED: RECEIVING WATER LAB WATER
CRITICAL DILUTION 100 % DATE TEST INITIATED:

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?

_____ Yes _____ No

PERCENT SURVIVAL -Menidia

PERCENT EFFLUENT	% SURVIVAL/REPLICATES					MEAN % SURVIVAL			CV %
	A	B	C	D	E	24-HR	48-HR	7 DAY	
0%									
32%									
42%									
56%									
75%									
100%									

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution?

_____ Yes _____ No

DATA TABLE FOR GROWTH - Menidia

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
32%							
42%							
56%							
75%							
100%							

TABLE 2 (Outfall 029)
SUMMARY SHEET CONTINUED
Menidia beryllina SURVIVAL AND GROWTH TEST

* Coefficient of variation - standard deviation x 100/mean

3. Are the test results to be considered valid?
_____ Yes _____ No
If __X__ no (test invalid), what reasons for invalidity?

4. Is this a retest of a previous invalid test?

_____ Yes _____ No
Is this a retest of a previous test failure?

_____ Yes _____ No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Menidia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC GROWTH = _____% effluent

PART III
STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction
   In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions
   a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

   b. Any person may be assessed an administrative penalty by the State Administrative Authority under LA. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants
   a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply
   a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action
This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant f acts, or the permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge; or

e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

f. Change of ownership or operational control;

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights
This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information
The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability
Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability
    If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution
    A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. Need to Halt or Reduce not a Defense
   It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate
   The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance

   a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

   b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

   a. ***Bypass***. The intentional diversion of waste streams from any portion of a treatment facility.

   b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

   c. Notice

      (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.

      (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6, (24-hour notice) and Section D.6.e. of these standard conditions.

d. Prohibition of bypass

(1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

(2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal
For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry
The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection

(1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records
Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents
Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures

a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use or disposal, approved under 40 CFR part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in this permit. This includes procedures contained in the latest EPA approved edition of the following publications:

(1) "Standard Methods for the Examination of Water and Waste Water". This publication is available from the American Public Health Association, Publication Sales, P. O. Box 753, Waldorf, MD 20604-0573, Phone number (301) 893-1894, Fax number (301) 843-0159.

(2) "Annual Book of Standards, Vols 1101-1103, Water I, Water II, and Atmospheric Analysis". This publication is available from the American Society for Testing Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, Phone number (610) 832-9500.

(3) "Methods for Chemical Analysis of Water and Wastes, Revised, March 1983," U.S. Environmental Protection Agency, Analytical Quality Control Laboratory, Cincinnati, Ohio. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-84-128677.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982" U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503. General laboratory procedures including glassware cleaning, etc. can be found in the "Handbook for Analytical Quality Control in Water and Wastewater Laboratories, 1979," U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory. This publication is available from the Environmental Protection Agency, Phone number (513) 569-7562. Order by EPA publication number EPA-600/4-79-019.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.

b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.

c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties

a. LA R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

b. LA R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non compliance.

8. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation

a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:

(1) Submitted on behalf of any facility, as defined in R.S.30:2004;
(2) Required as part of any permit application;
(3) Required by order of the department;
(4) Required to be included on any monitoring reports submitted to the department;
(5) Required to be submitted by contractor
(6) Otherwise required by department regulations.

b. The department laboratory accreditation program is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not accredited under these regulations will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

c. Regulations on the Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located at:

http://www.deq.state.la.us/laboratory/index.htm.

Questions concerning the program may be directed to (225) 765-0582.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes
The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance
The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under LAC 33:IX.2903. A.2.b), or a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

4. Monitoring Reports
Monitoring results shall be reported at the intervals and in the form specified in Part I or Part II of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500's and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276

5. Compliance Schedules
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification
As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification
As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) as follows:

(1) by the Online Incident Reporting screens found at http://www3.deq.louisiana.gov/surveillance/irf/forms/ ;or
(2) by e-mail utilizing the Incident Report Form and instructions found at http://www.deq.louisiana.gov/portal/Default.aspx?tabid=279;or
(3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;

(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;

(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;

(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;

(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;

(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:IX.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;

(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;

(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;

(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:

(a) the current permitted limit for the pollutant(s) released;and
(b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;

(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

(8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and; steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);

(2) Any upset which exceeds any effluent limitation in the permit;

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information
Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances
In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:

i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/L);
(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:

i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 µg/L);
(2) One milligram per liter (1 mg/L) for antimony;
(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements
All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and

accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a.(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a.(1)(b) rather than to specific individuals.

(2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
(3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
  (a) The chief executive officer of the agency, or
  (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;
(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
(3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports
All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;
b. Permit applications, permits, and effluent data.
c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties
   The Louisiana Revised Statutes LA. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with R.S.49:1001 et seq.

7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average (also known as Daily Average), other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

20. Sewage sludge means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; portable toilet pumpings, type III marine sanitation device pumpings (33 CFR part 159); and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

21. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)

22. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

23. The term MGD shall mean million gallons per day.

24. The term mg/L shall mean milligrams per liter or parts per million (ppm).

25. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

26. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

27. Weekly average, (also known as 7-day average), other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

28. Sanitary Wastewater Term(s):

    a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

    b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.